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ABSTRACT

A brief summary of data, in tables with some narrative, from the Survey of Earned Doctorates during fiscal year 1980 is presented. Both research and applied research doctorates with these degree designations are included: DAS, DArch, DA, DBA, JCD, DCJ, DCrim, EdD, DEng, DESC, ScDE, DEnv, DED, DPA, DF, DGS, DHS (Health and Safety), DHS (Hebrew Studies), DHL, DIT, SDJ, JSD, DLS, DMin or DM (Ministry), DM (Music), DMA, DME, DML, DNsc, PhD, DPE, DPA, DPH, DRec, or DR, DRE, DSM, STD, DSc, DSch, DScD, LScD, DScVM, DSSc, DSW, and ThD; some other are excluded. The five basic tables and one sub-table present: (1) the number of doctorate recipients by sex and subfield; (1a) recipients by citizenship, racial/ethnic group, and subfield; (2) statistical profile by sex and doctorate field (including such characteristics as marital status, bachelor's and master's degrees and fields, time lapse, study and employment plans, and employment region and activity); (3) percentage of recipients by sources of support in graduate school, by sex, and summary field; and (5) statistical profile by racial or ethnic groups and U.S. citizenship status. The survey questionnaire and a specialties list are appended. (MSE)

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Summary Report 1980

DOCTORATE RECIPIENTS FROM UNITED STATES UNIVERSITIES

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HIGHLIGHTS

- The total number of doctorates awarded in 1980 was 30,982, a 0.8% decrease from the 31,224 doctorates awarded in 1979.
- The proportion of doctorates granted to women increased from 28.6% of the total in 1979 to 30.3% in 1980, extending a trend that began in 1965. The number of women increased in all broad fields except the humanities.
- The number of male doctorate recipients decreased 3.1% from 1979 to 1980, a continuation of the steady decline from the peak year of 1972. This overall decrease was reflected in all broad fields except the life sciences, where the number increased by 2.5%.
- Of the U.S. citizen doctorate recipients in 1980, a greater number of women reported black racial/ethnic identification than did men. This is the first time women constituted a higher proportion than men in any of the racial/ethnic groups reported here.
- While the number of foreign citizens with permanent visas earning Ph.D.'s from U.S. universities has decreased by 38.6% from its peak year in 1972, the number of temporary visa holders has increased through the 1970's, reaching an all-time high of 3,632 in 1980.
- Foreign doctorate recipients are largely concentrated in science fields - about one-half of the engineering doctorates (46.3%) and one-third of the Ph.D.'s in the agricultural sciences (36.5%) in 1980 were foreign citizens.
- From 1960 to 1980, the geographic areas of Eastern and Western Asia were the sources for the largest number of foreign citizens earning doctorates in the U.S. In 1980, the Asian geographic areas accounted for nearly 44% of the total number of foreign doctorate recipients.
- In 1980, the three sources of financial support administered through the university - University Fellowship, Teaching Assistantship, and Research Assistantship - represented the primary support for 39.2% of the Ph.D.'s, with foreign citizens reporting greater dependence on support from these sources than their U.S. counterparts.
- For foreign citizens, the planned employment location following the doctorate is highly dependent on visa status - 87.4% of permanent visa holders and 25.8% of the temporary group have firm commitments to remain in the U.S. for employment.

**Summary
Report
1980
DOCTORATE
RECIPIENTS
FROM
UNITED
STATES
UNIVERSITIES**

The Survey of Earned Doctorates is
conducted by the
National Research Council for the
National Science Foundation,
the U.S. Office of Education,
the National Institutes of Health, and
the National Endowment for the Humanities

Peter D. Syverson
Operations Manager
Doctorate Survey Project

Commission on Human Resources
NATIONAL RESEARCH COUNCIL

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1981

FOREWORD

This report presents a brief summary of data gathered from the Survey of Earned Doctorates during the academic year 1979-1980. The survey is conducted annually by the Commission on Human Resources (CHR) of the National Research Council. Questionnaire forms, distributed with the cooperation of the Graduate Deans, are filled out by the graduates as they complete all requirements for their doctoral degrees. The doctorates reported here were earned during the period July 1, 1979 to June 30, 1980 (FY 1980) and include both research and applied research doctorates with degrees such as the D.Sc.M., S.J.D., D.L.S., Th.D., and Ed.D. They do not include professional degrees such as the M.D., D.D.S., D.M.D., O.D., D.O., D.V.M., or J.D. A full list of titles of degrees included is shown on the inside back cover.

This is the fourteenth in a series of yearly summaries of data from the Survey of Earned Doctorates. The CHR publishes data gathered during a given fiscal year in the following fiscal year. Trend data from earlier periods can be found in the book *A Century of Doctorates* (National Academy of Sciences, 1978).

The distribution of the Survey of Earned Doctorates questionnaire, the maintenance of the resulting data file, and the publication of this report are supported jointly by the National Science Foundation, the Department of Education, the National Institutes of Health, and the National Endowment for the Humanities. The CHR thanks these agencies for their assistance. Dr. Charles Dickens of the National Science Foundation is the project officer for the agencies; his interest and assistance are appreciated.

The Survey of Earned Doctorates is under the administrative supervision of Peter D. Syverson. Muriel Quinones had continuing responsibility for the development of the summary statistics presented in the report. In addition to Dr. Dickens of the National Science Foundation, Donald Bigelow of the Department of Education, George Bowden of the National Institutes of Health, and Arnita Jones of the National Endowment for the Humanities, have provided constructive advice in the design and analysis of the survey, a contribution that increases its relevance to national policy issues. Nancy Milburn and Mario Molina, members of the Commission on Human Resources, provided valuable assistance in review of the report. Special appreciation also goes to Doris Rogowski who supervised the coding and editing of the data, to Joseph Finan and George Boyce who were responsible for the computer programming and processing, and to Olivia Waller for her meticulous care in typing the report.

The CHR is concerned with those activities of the National Research Council that contribute to the more effective development and utilization of the nation's human resources. Its programs seek to strengthen higher education and to develop better understanding of the educational process. It is hoped that prompt reporting of the present data to educational, governmental, and professional agencies will facilitate planning in higher education. Suggestions for improvement of the content or format of the report and questions or comments will be welcomed. Such communications may be directed to the Commission on Human Resources, National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

Peter D. Syverson
Operations Manager

NOTICE: This report is based on research conducted by the National Research Council with the support of the National Science Foundation, the Department of Education, the National Institutes of Health, and the National Endowment for the Humanities under NSF Contract No. SRS-7917001. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author and do not necessarily reflect the views of the sponsoring agencies.

INTRODUCTION

Between July 1, 1979 and June 30, 1981 a total of 30,982 research doctorates were awarded by U.S. universities (Text Table A). This number constitutes a decrease of 242 or 0.8% from the 31,224 doctorates awarded in 1979 and an overall decrease of 8.5% from the peak year, 1973.

TEXT TABLE A
Doctorates Awarded by U.S. Universities, 1979-1980

Year	Doctorates	Year	Doctorates
1966	17,949	1974	33,047
1967	20,404	1975	32,950
1968	22,936	1976	32,945
1969	25,743	1977	31,713
1970	29,498	1978	30,866
1971	31,867	1979	31,224
1972	33,043	1980	30,982
1973	33,756		

Figure 1, which displays data from Text Table A on the trend in doctorates awarded, shows a period of large annual increases from 1966 to 1973 followed by smaller decreases through 1980 with the exception of a slight increase between 1978 and 1979. The 0.8% decrease from 1979 to 1980 represents a con-

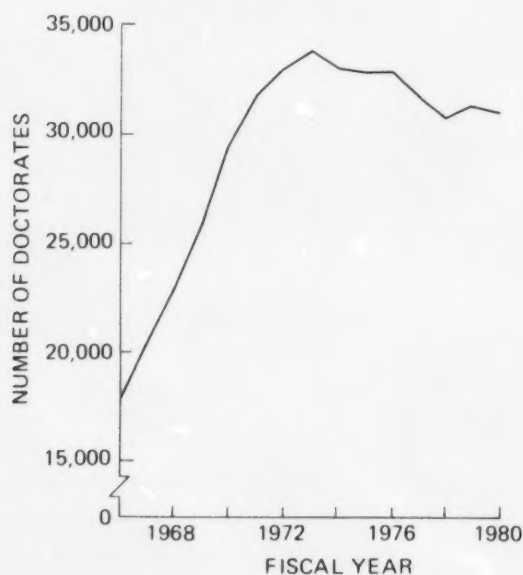


FIGURE 1
Doctorates Awarded by U.S. Universities, 1965-1979

tinuation of the downward trend that began in 1973.

Selected statistics from the 1980 Survey of Earned Doctorates and from past surveys are highlighted in this report. In light of current interest in foreign citizens pursuing courses of study in the U.S., this report focuses on non-U.S. citizen doctorate recipients - their countries of citizenship, fields of Ph.D., sources of support for graduate study, and postdoctoral employment and study plans.

The Summary Report for 1979 highlighted trends in postgraduation employment plans by field of Ph.D. and racial/ethnic group, and trends in the number of doctorate recipients planning postdoctoral study in foreign countries. The postgraduation plans of 1971-1978 doctorate recipients from departments rated as distinguished in the Roose-Andersen study^{1/} were examined in the 1978 Summary Report.

TRENDS IN THE NUMBER OF DOCTORATES BY FIELD FOR MEN AND WOMEN

Text Table B and Figure 2 show the distribution of doctorate recipients by broad field and sex for the period 1970 to 1980. The proportion of doctorates granted to women increased from 28.6% of the total in 1979 to 30.3% in 1980, continuing a trend that began in 1965 when 10.5% of the doctorate recipients were women. The number of women doctorates has increased each year since 1965.^{2/} Indeed, even as the total number of Ph.D.'s granted has tended to decline since 1973, the number of doctorates granted to women has increased 54.2%.

From 1979 to 1980, the number of women doctorate recipients increased in all broad fields except the humanities, which has shown slight annual decreases since 1975. The largest numerical increase was in education, a field in which the fraction of women doctorates has more than doubled during the last decade. The largest rate of increase was in engineering, which showed a growth of 45.2% between 1979 and 1980. Despite this large proportional increase, the absolute number of women Ph.D.'s in engineering remains the lowest of the seven broad fields shown in Table B.

The decrease of 696 or 3.1% in men doctorate recipients from 1979 to 1980 represents a continuation of the steady decline from the peak year of

^{1/}Roose, Kenneth D. and Charles J. Andersen, *A Rating of Graduate Programs*, American Council on Education, Washington, D.C., 1970.

^{2/}Data for 1920 to 1970 were provided in *Summary Report 1975: Doctorate Recipients from United States Universities*, p.4., National Research Council, 1976.

1972. This overall decrease was reflected in all broad fields except the life sciences, which increased by 2.5%. The humanities and professional fields showed the sharpest declines from 1979 to 1980 (8.3% and 7.9% respectively). About one-third fewer doctorates were granted to men in the physical sciences, engineering, and the humanities than were granted in the peak years for those fields (1971 for physical sciences and engineering, 1973 for the humanities).

FOREIGN CITIZENS EARNING DOCTORATES FROM U.S. UNIVERSITIES

Since the beginning of the Survey of Earned Doctorates in 1954, data on the citizenship status of doctorate recipients have been collected. A portion of the extensive data available from the Doctorate Records File on a topic of current interest - non-U.S. citizens who earn the doctorate at U.S. universities - has been selected for presentation here. While the tables and graphs that follow are by no means exhaustive of the doctoral data, they illustrate some of the ways in which the data can be used.

Trends in the Number of Doctorate Recipients by Citizenship and Sex

Text Table C shows the citizenship status and sex of doctorate recipients from 1960 to 1980. During this period, the proportion of non-U.S. citizen doctorate recipients increased steadily, from 12.1% in 1960 to 15.9% in 1980. From 1960 to the peak year of 1973, the number of degrees awarded to non-U.S. citizens increased at a rate about one-fifth greater than that for total doctorates. While the number of doctorates awarded to U.S. citizens also peaked in 1973, the number awarded to non-U.S. citizens continued to increase and did not reach a peak until 1975. Since 1973, there has been an overall decrease of 8.2% in total doctorates, but this decrease has been greater for U.S. citizens (-10.1%) than that for non-U.S. citizens (-4.9%).

Within the non-U.S. citizen doctorate recipients, the two visa status categories^{4/} - permanent and temporary - have experienced substantially different growth patterns over the past two decades. Figure 3 shows that between 1960 and 1973, the increase in the permanent group was over twice that for the temporary group. The permanent group also peaked in 1972, one year earlier than the peak for

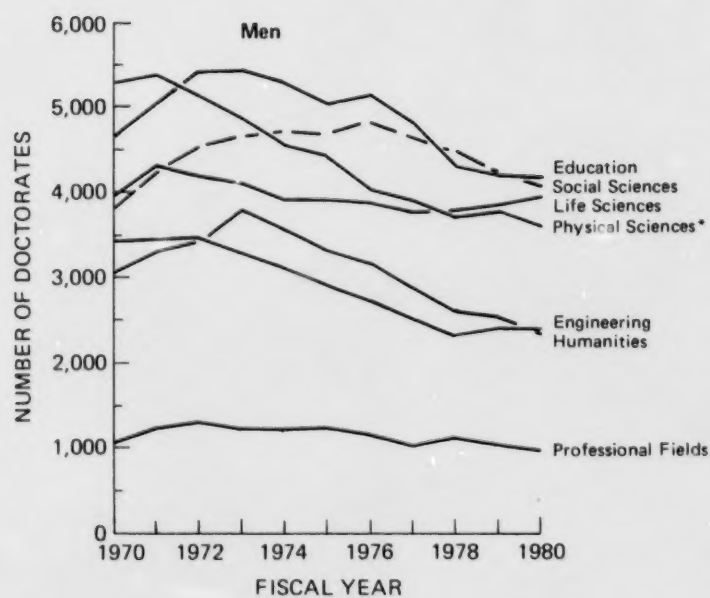
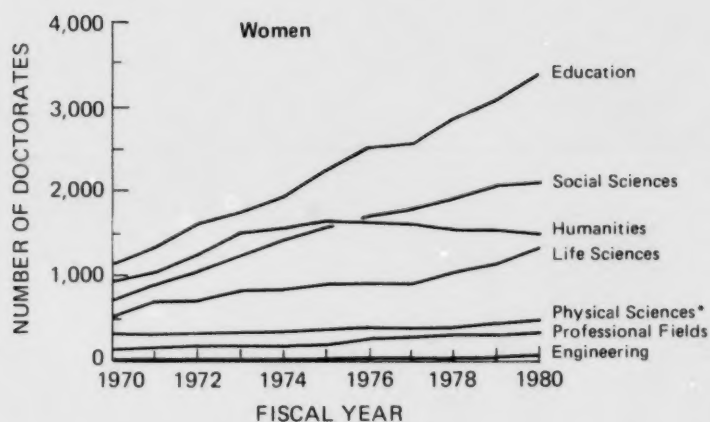
TEXT TABLE B

Number of Doctorates Awarded by United States Universities by Broad Field and Sex, 1970-1980

Year	Total	Physical Sciences ^{3/}	Engineering	Life Sciences	Social Sciences	Humanities	Prof. Fields	Education
MEN								
1970	25,527	5,308	3,419	3,989	3,829	3,095	1,072	4,671
1971	27,271	5,398	3,483	4,360	4,265	3,314	1,262	5,089
1972	27,756	5,171	3,481	4,221	4,558	3,440	1,348	5,439
1973	27,671	4,929	3,318	4,140	4,692	3,817	1,258	5,456
1974	26,594	4,592	3,114	3,967	4,727	3,594	1,226	5,302
1975	25,749	4,454	2,950	3,955	4,710	3,359	1,243	5,064
1976	25,261	4,089	2,780	3,921	4,856	3,208	1,189	5,185
1977	23,855	3,949	2,569	3,816	4,691	2,903	1,041	4,870
1978	22,548	3,754	2,370	3,808	4,510	2,635	1,125	4,339
1979	22,291	3,803	2,428	3,887	4,283	2,545	1,053	4,277
1980	21,595	3,612	2,389	3,983	4,088	2,335	970	4,201
WOMEN								
1970	3,971	320	15	588	737	972	143	1,186
1971	4,596	341	15	715	924	1,063	177	1,346
1972	5,287	367	22	731	1,053	1,274	184	1,646
1973	6,085	382	46	868	1,246	1,547	201	1,783
1974	6,453	384	33	867	1,446	1,576	194	1,939
1975	7,201	403	52	950	1,600	1,687	208	2,295
1976	7,684	420	54	959	1,734	1,673	290	2,540
1977	7,858	430	74	957	1,837	1,659	308	2,585
1978	8,318	439	53	1,083	1,955	1,596	330	2,855
1979	8,933	496	62	1,194	2,109	1,592	366	3,106
1980	9,387	502	90	1,342	2,165	1,528	375	3,375

^{3/} Includes mathematics and computer sciences.

^{4/} See item 7 on page 40 for definition of the citizenship categories used in this report. The category "U.S. Citizen" includes U.S. native and U.S. naturalized citizens.



*Includes mathematics and computer sciences.

FIGURE 2
Number of Doctorates Awarded by U.S. Universities by Broad Field and Sex, 1970-1980

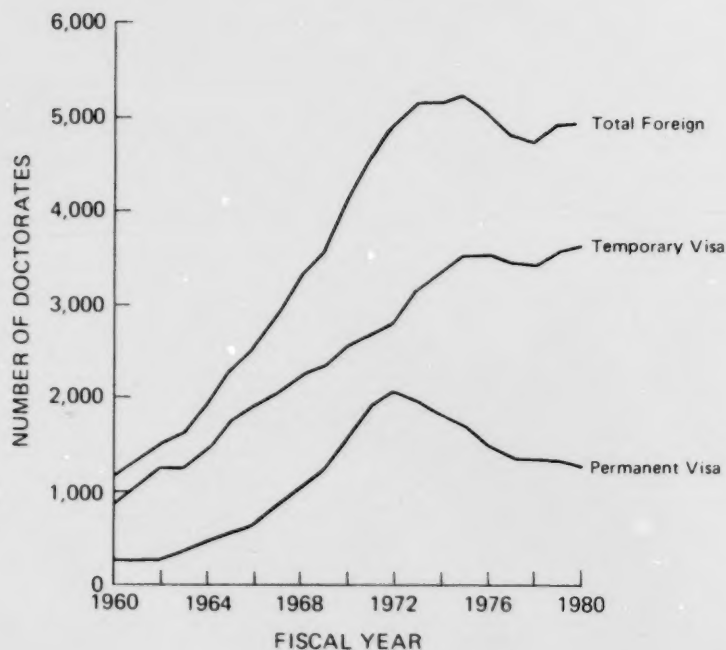


FIGURE 3
Visa Status of Non-U.S. Citizen Doctorate
Recipients, 1960-1980

all doctorates, whereas the number of doctorates earned by persons with temporary visas has continued to increase. Since 1973, the temporary group has grown 14.4%, while the permanent group has had an overall decrease of 35.6%, more than four times that for total doctorates.

There are striking differences between the citizenship status of men and women doctorate recipients. During the past 20 years, an increasing proportion of men have been non-U.S. citizens, whereas the proportion of non-U.S. women has decreased. Text Table C shows that while in 1960, the proportion of men and women who were foreign citizens was nearly the same (12.2% and 11.1% respectively), by 1980 the proportion of foreign citizens among male Ph.D.'s was more than double that for women (19.0% and 8.6% respectively). Although the number of U.S. men Ph.D.'s has increased from 7,556 to 16,807, these numbers represent a decrease from 77.6% to 54.2% of the total number of new Ph.D.'s. On the other hand, the proportion of U.S. women Ph.D.'s has increased from 9.2% to 26.8% of the total.

Between 1960 and 1980, the proportion of men doctorate recipients with temporary visas increased from 9.3% to 14.5%, whereas the proportion

for women declined steadily from 1960 to 1970 and has remained stable at about 5.0% for the past 10 years. In contrast, the proportion of men and women with permanent visas has been about the same over the past two decades.

Field of Doctorate

Although the overall trend from 1960 to 1980 has been for an increasing proportion of U.S. doctorate recipients to be citizens of foreign countries, Figure 4 and Text Table D show the widely differing patterns that exist among the doctoral fields. For physics, chemistry, and mathematics, the general pattern has been significant increases in the proportion of non-U.S. doctorate recipients during the last two decades. With slight variation, the proportion of permanent and temporary visa holders has increased at about the same rate in those fields. While reaching a peak in the early 1970's, the proportion of foreign Ph.D.'s in the earth sciences has since returned to the levels characteristic of the early 1960's.

Since 1976, engineering has been the field with the largest proportion of foreign doctorate

TEXT TABLE C
CITIZENSHIP STATUS AND SEX OF 1960-1980 DOCTORATE RECIPIENTS FROM U.S.
UNIVERSITIES

YEAR OF DOCTORATE		TOTAL					MEN					WOMEN				
		^{1/} TOTAL	U.S.	NON-U.S. TOTAL	PERM.	TEMP.	TOTAL	U.S.	NON-U.S. TOTAL	PERM.	TEMP.	TOTAL	U.S.	NON-U.S. TOTAL	PERM.	TEMP.
1960	H ^{2/}	9733	8469 87.0	1176 12.1	279 2.9	897 9.2	8691	7556 86.9	1060 12.2	248 2.9	812 9.3	1042	913 87.6	116 11.1	31 3.0	85 8.2
1961	H	10413	8961 86.1	1306 12.5	256 2.5	1050 10.1	9285	7975 85.9	1184 12.8	229 2.5	955 10.3	1128	986 87.4	122 10.8	27 2.4	95 8.4
1962	H	11500	9841 85.6	1518 13.2	274 2.4	1244 10.8	10265	8753 85.3	1387 13.5	245 2.4	1142 11.1	1235	1088 88.1	131 10.6	29 2.3	102 8.3
1963	H	12730	10927 85.8	1605 12.6	354 2.8	1251 9.8	11337	9691 85.5	1466 12.9	321 2.8	1145 10.1	1393	1236 88.7	139 10.0	33 2.4	106 7.6
1964	H	14325	12121 84.6	1931 13.5	468 3.3	1463 10.2	12764	10774 84.4	1757 13.8	420 3.3	1337 10.5	1561	1347 86.3	174 11.1	48 3.1	126 8.1
1965	H	16340	13772 84.3	2313 14.2	560 3.4	1753 10.7	14580	12245 85.0	2130 14.6	499 3.4	1631 11.2	1760	1527 86.8	183 10.4	61 3.5	122 6.9
1966	H	17949	14974 83.4	2544 14.2	636 3.5	1908 10.6	15863	13179 83.1	2309 14.6	567 3.6	1742 11.0	2086	1795 86.0	235 11.3	69 3.3	166 8.0
1967	H	20404	17030 83.5	2924 14.3	876 4.3	2048 10.0	17962	14931 83.1	2642 14.7	793 4.4	1845 10.3	2442	2099 86.0	282 11.5	83 3.4	199 8.1
1968	H	22936	19227 83.8	3314 14.4	1046 4.6	2268 9.9	20004	16674 83.4	2984 14.9	904 4.5	2080 10.4	2932	2553 87.1	330 11.3	142 4.8	188 6.4
1969	H	25743	21541 83.7	3569 13.9	1235 4.8	2334 9.1	22355	18580 83.1	3214 14.4	1094 4.9	2120 9.5	3388	2961 87.4	355 10.5	141 4.2	214 6.3
1970	H	29498	24915 84.5	4148 14.1	1576 5.3	2572 8.7	25527	21430 84.0	3718 14.6	1368 5.4	2350 9.2	3971	3405 87.8	430 10.8	208 5.2	222 5.6
1971	H	31867	26758 84.0	4597 14.4	1907 6.0	2690 8.4	27271	22713 82.3	4119 15.1	1661 6.1	2458 9.0	4596	4045 88.0	478 10.4	246 5.4	232 5.0
1972	H	33043	27480 83.2	4925 14.9	2094 6.3	2831 8.6	27756	22849 82.3	4360 15.7	1788 6.4	2572 9.3	5287	4631 87.6	565 10.7	306 5.8	259 4.9
1973	H	33756	27914 82.7	5172 15.3	1558 5.9	3174 9.4	27671	22541 81.5	4581 16.6	1706 6.2	2875 10.4	6085	5373 88.3	591 9.7	292 4.8	299 4.9
1974	H	33047	26143 79.7	5185 15.7	1826 5.5	3359 10.2	26594	20856 78.4	4546 17.1	1538 5.8	3008 11.3	6453	5487 85.0	639 9.9	288 4.5	351 5.4
1975	H	32950	27079 82.2	5250 15.9	1714 5.2	3536 10.7	25749	20661 80.2	4599 17.9	1417 5.5	3182 12.4	7201	6418 89.1	651 9.0	297 4.1	354 4.9
1976	H	32945	27269 82.8	5023 15.2	1494 4.5	3529 10.7	25261	20427 80.9	4325 17.1	1204 4.8	3121 12.4	7684	6842 89.0	698 9.1	290 3.8	408 5.3
1977	H	31713	26105 82.3	4816 15.2	1368 4.3	3448 10.9	23855	19144 80.3	4115 17.3	1106 4.6	3009 12.6	7858	6961 88.6	701 8.9	262 3.3	439 5.6
1978	H	30866	25287 81.9	4765 15.4	1344 4.4	3421 11.1	22548	17933 79.5	4018 17.8	1052 4.7	2966 13.2	8318	7354 88.4	747 9.0	292 3.5	455 5.5
1979	H	31224	25462 81.5	4903 15.7	1319 4.2	3584 11.5	22291	17579 78.9	4102 18.4	1013 4.5	3086 13.9	8933	7883 88.2	801 9.0	306 3.4	495 5.5
1980	H	30982	25108 81.0	4918 15.9	1286 4.2	3632 11.7	21595	16807 77.8	4113 19.0	971 4.5	3142 14.5	9387	8301 88.4	805 8.6	315 3.4	490 5.2

1/ Includes those individuals who did not report citizenship status.

2/ H provides horizontal percentages within rows based on the total column for each of the three groupings - total, men, and women.

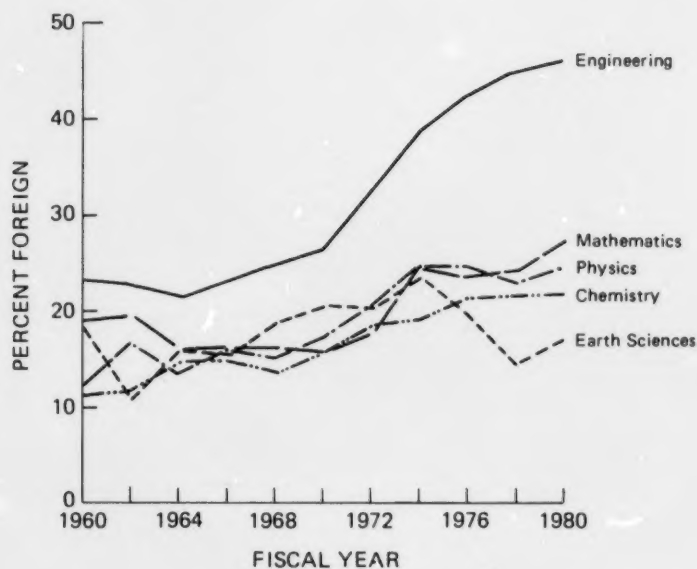


FIGURE 4
Proportion of Non-U.S. Doctorate Recipients by Field, 1960-1980
Part A—Physics, Chemistry, Earth Sciences, Mathematics, and Engineering

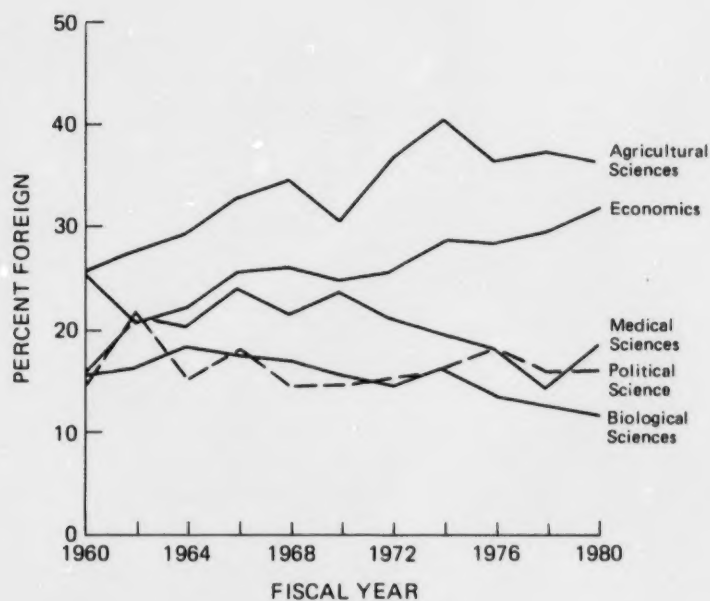


FIGURE 4
Part B—Life and Social Sciences

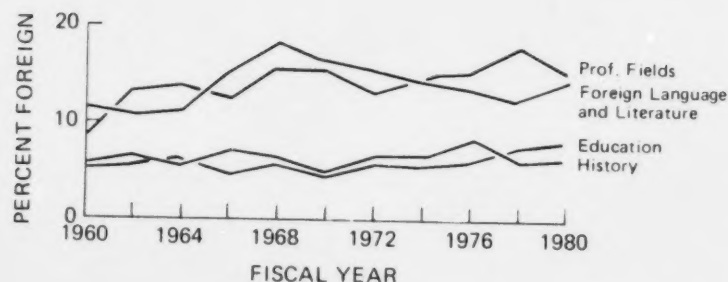


FIGURE 4
Part C—Humanities, Education, and Professional Fields

recipients. In 1980, nearly half (46.3%) of the engineering doctorates were foreign citizens. It is also the field with the largest number of non-U.S. citizens, accounting for 23.4% of the total foreign doctorate population in 1980, while being only 8.0% of all doctorates granted. This increase in the proportion of foreign engineering doctorates has been the result of a 50% decrease in the number of U.S. doctorates and an 80% increase in the number of temporary visa holders from 1970 to 1980. Even though the number of permanent visa Ph.D.'s peaked in 1972, their proportion of total engineering doctorates in 1980 was nearly the same as in 1970.

Of the ten science fields included in Text Table D, the earth, biological, and medical sciences are the only disciplines that experienced a general decrease through the 1970's in the proportion of non-U.S. doctorate recipients. The agricultural sciences, which now has the second largest proportion of foreign doctorate recipients, was replaced by engineering in 1976 as the leading field for foreign doctorates. It is also the field with the highest ratio of temporary to permanent visa holders - about 8 to 1 compared to an average ratio of 2.5 to 1 for all other fields.

The two social science fields selected for analysis - political science and economics - show substantially different patterns of foreign doctorate recipients. For political science, the percentage of non-U.S. citizen Ph.D.'s has, with some fluctuation, remained at about the same level during the 1960-1980 period. The proportion of foreign doctorates in economics, however, has increased steadily since 1962. As in engineering, the increase in foreign doctorates in economics during the 1970's has been the result of overall increases in the proportion of temporary visa

holders coincident with decreases in the proportion of U.S. economics doctorates.

Part C. of Figure 4 illustrates that, in contrast to the science fields, the humanities, professional fields, and education attract a smaller and more stable number of foreign citizens. Among the humanities fields, foreign languages and literature is the area with the largest proportion of non-U.S. citizen doctorate recipients. At the same time, it has been the only discipline where between 1960 and 1980, the number of permanent visa Ph.D.'s has consistently exceeded the number with temporary visas. The pattern shown in the field of history, with a generally level curve and a small proportion of foreign doctorate recipients, is more typical of the humanities fields. While the number of non-U.S. doctorates in the professional fields increased in the early 1960's, their number has remained generally stable since 1970. In education, the proportion of foreign Ph.D.'s, although small, has increased steadily since 1970.

Country of Citizenship

Figure 5 shows the geographic areas of origin for foreign citizens who earned the doctorate in the U.S. between 1960 and 1980. In general, the trend in number of doctorates from these areas has followed that for the doctoral population as a whole - sharp increases from 1960 to 1970, followed by decreases in 1975 and 1980. Exceptions to this general trend include the areas of Mexico, Central and South America, and Africa, with steady increases from 1960 through 1980 and Canada, with a decrease of about 30% from 1970 to 1980.

From 1960 to 1980, Eastern and Western Asia

TEXT TABLE D
FIELD OF DEGREE AND CITIZENSHIP STATUS OF 1960-1980 DOCTORATE RECIPIENTS.

- PHYSICS AND ASTRONOMY

CITIZENSHIP		YEAR OF DOCTORATE										
		1960	1962	1964	1966	1968	1970	1972	1974	1976	1978	1980
TOTAL		530	710	866	1061	1436	1655	1634	1339	1237	1067	985
U.S.		459	580	716	851	1186	1337	1278	956	911	804	717
	V 1/	86.6	81.7	82.7	80.2	82.6	80.8	78.2	71.4	73.6	75.4	72.8
NON-U.S. TOTAL		65	116	118	169	217	286	334	328	304	245	240
	V	12.3	16.3	13.6	15.9	15.1	17.3	20.4	24.5	24.6	23.0	24.4
NON-U.S., PERMANENT		17	19	27	40	63	99	125	98	76	64	51
	V	3.2	2.7	3.1	3.8	4.4	6.0	7.6	7.3	6.1	6.0	5.2
NON-U.S., TEMPORARY		48	97	91	129	154	187	209	230	228	181	189
	V	9.1	13.7	10.5	12.2	10.7	11.3	12.8	17.2	18.4	17.0	19.2
UNKNOWN		6	14	32	41	33	32	22	55	22	18	28
	V	1.1	2.0	3.7	3.9	2.3	1.9	1.3	4.1	1.8	1.7	2.8

- CHEMISTRY

TOTAL		1078	1138	1351	1594	1803	2238	2019	1797	1624	1544	1538
U.S.		954	998	1146	1322	1530	1874	1611	1383	1264	1174	1165
	V	88.5	87.7	84.8	82.9	84.9	83.7	79.8	77.0	77.8	76.0	75.7
NON-U.S. TOTAL		119	133	193	234	241	340	375	342	344	335	336
	V	11.0	11.7	14.3	14.7	13.4	15.2	18.6	19.0	21.2	21.7	21.8
NON-U.S., PERMANENT		24	23	53	57	63	164	197	159	141	119	99
	V	2.2	2.0	3.9	3.6	3.5	7.3	9.8	8.8	8.7	7.7	6.4
NON-U.S., TEMPORARY		95	110	140	177	178	176	178	183	203	216	237
	V	8.8	9.7	10.4	11.1	9.9	7.9	8.8	10.2	12.5	14.0	15.4
UNKNOWN		5	7	12	38	32	24	33	72	16	35	37
	V	.5	.6	.5	2.4	1.8	1.1	1.6	4.0	1.0	2.3	2.4

- EARTH, ENVIRONMENTAL AND MARINE SCIENCES

TOTAL		253	249	310	404	442	510	604	629	645	623	628
U.S.		206	221	252	334	350	400	473	457	508	518	510
	V	81.4	88.8	81.3	82.7	79.2	78.4	78.3	72.7	78.8	83.1	81.2
NON-U.S. TOTAL		45	26	45	62	83	104	122	148	128	90	106
	V	17.8	10.4	15.8	15.3	18.8	20.4	20.2	23.5	19.8	14.4	16.9
NON-U.S., PERMANENT		10	3	11	10	17	33	58	47	32	22	26
	V	4.0	1.2	3.5	2.5	3.8	6.5	9.6	7.5	5.0	3.5	4.1
NON-U.S., TEMPORARY		35	23	38	52	66	71	64	101	96	68	80
	V	13.8	9.2	12.3	12.9	14.9	13.9	10.6	16.1	14.9	10.9	12.7
UNKNOWN		2	2	9	8	9	6	9	24	9	15	12
	V	.8	.8	2.9	2.0	2.0	1.2	1.5	3.8	1.4	2.4	1.9

- MATHEMATICS

TOTAL		291	388	588	769	971	1225	1281	1211	1003	838	745
U.S.		233	309	486	631	797	1018	1030	876	748	619	520
	V	80.1	79.6	82.7	82.1	82.1	83.1	80.4	72.3	74.6	73.5	69.8
NON-U.S. TOTAL		55	75	92	122	156	192	234	295	238	202	202
	V	18.9	19.3	15.6	15.9	16.1	15.7	18.3	24.4	23.7	24.1	27.1
NON-U.S., PERMANENT		11	10	12	25	44	58	65	71	55	47	63
	V	3.8	2.6	2.0	3.3	4.5	4.7	5.1	5.9	5.5	5.6	8.5
NON-U.S., TEMPORARY		44	65	80	97	112	134	169	224	183	155	139
	V	15.1	16.8	13.6	12.6	11.5	10.9	13.2	18.5	18.2	18.5	18.7
UNKNOWN		3	4	10	16	18	15	17	40	17	17	23
	V	1.0	1.0	1.7	2.1	1.9	1.2	1.3	3.3	1.7	2.0	3.1

1/ V provides vertical percentages within columns based on the total for each field.

TEXT TABLE D. CONTINUED

- ECONOMICS

CITIZENSHIP		YEAR OF DOCTORATE										
		1960	1962	1964	1966	1968	1970	1972	1974	1976	1978	1980
TOTAL		352	418	527	627	747	853	895	853	885	801	767
U.S.		260	322	387	442	537	630	648	578	620	531	502
	V 1/	73.9	77.0	73.4	70.5	71.9	73.9	72.4	67.8	70.1	66.3	65.4
NON-U.S. TOTAL		88	85	116	159	194	212	228	243	250	238	245
	V	25.0	20.3	22.0	25.4	26.0	24.9	25.5	28.5	28.2	29.7	31.9
NON-U.S., PERMANENT		22	13	22	33	45	65	64	55	48	53	53
	V	6.3	3.1	4.2	5.3	6.0	7.6	7.2	6.4	5.4	6.6	6.9
NON-U.S., TEMPORARY		66	72	94	126	149	147	164	188	202	185	192
	V	18.8	17.2	17.8	20.1	19.9	17.2	18.3	22.0	22.8	23.1	25.0
UNKNOWN		4	11	24	26	16	11	19	32	15	32	20
	V	1.1	2.6	4.6	4.1	2.1	1.3	2.1	3.8	1.7	4.0	2.6

- POLIT. SCI., PUBLIC ADMIN., & INT'L REL.

TOTAL		238	278	337	408	580	636	911	709	887	851	729
U.S.		195	209	269	319	472	528	743	719	707	690	573
	V	81.9	75.2	79.8	78.2	81.4	83.0	81.6	79.1	79.7	81.1	78.6
NON-U.S. TOTAL		35	61	51	74	85	93	139	147	159	136	119
	V	14.7	21.9	15.1	18.1	14.7	14.6	15.3	16.2	17.9	16.0	16.3
NON-U.S., PERMANENT		6	8	13	21	39	34	57	49	33	41	32
	V	2.5	2.9	3.9	5.1	6.7	5.3	6.3	5.4	3.7	4.8	4.4
NON-U.S., TEMPORARY		29	53	38	53	46	59	82	98	126	55	87
	V	12.2	19.1	11.3	13.0	7.9	9.3	9.0	10.8	14.2	11.2	11.9
UNKNOWN		8	8	17	15	23	15	29	43	21	25	37
	V	3.4	2.9	5.0	3.7	4.0	2.4	3.2	4.7	2.4	2.9	5.1

- FOREIGN LANGUAGES AND LITERATURE

TOTAL		213	252	345	451	629	733	919	975	914	704	589
U.S.		180	214	293	372	497	602	756	806	777	596	478
	V	84.5	84.9	84.9	82.5	79.0	82.1	82.3	82.7	85.0	84.7	81.2
NON-U.S. TOTAL		24	26	38	68	114	120	142	140	126	50	84
	V	11.3	10.3	11.0	15.1	18.1	16.4	15.5	14.4	13.8	12.8	14.3
NON-U.S., PERMANENT		13	12	26	46	68	86	102	102	82	50	52
	V	6.1	4.8	7.5	10.2	10.8	11.7	11.1	10.5	9.0	7.1	8.8
NON-U.S., TEMPORARY		11	14	12	22	46	34	40	38	44	40	32
	V	5.2	5.6	3.5	4.9	7.3	4.6	4.4	3.9	4.8	5.7	5.4
UNKNOWN		9	12	14	11	18	11	21	29	11	18	27
	V	4.2	4.8	4.1	2.4	2.9	1.5	2.3	3.0	1.2	2.6	4.6

- HISTORY

TOTAL		364	366	530	645	741	1091	1186	1186	1095	852	744
U.S.		338	333	488	578	682	1015	1098	1074	995	783	677
	V	92.9	91.0	92.1	89.6	92.0	93.0	92.6	90.6	90.9	91.5	91.0
NON-U.S. TOTAL		20	23	29	45	48	53	69	69	79	51	47
	V	5.5	6.3	5.5	7.0	6.5	4.9	5.8	5.8	7.2	6.0	6.3
NON-U.S., PERMANENT		9	6	15	18	21	26	26	29	26	14	18
	V	2.5	1.6	2.8	2.8	2.8	2.4	2.2	2.4	2.4	1.6	2.4
NON-U.S., TEMPORARY		11	17	14	27	27	27	43	40	53	37	29
	V	3.0	4.6	2.6	4.2	3.6	2.5	3.6	3.4	4.8	4.3	3.9
UNKNOWN		6	10	13	22	11	23	19	43	21	18	20
	V	1.6	2.7	2.5	3.4	1.5	2.1	1.6	3.6	1.9	2.1	2.7

TEXT TABLE D. CONTINUED

- ENGINEERING

CITIZENSHIP	YEAR OF DOCTORATE										
	1960	1962	1964	1966	1968	1970	1972	1974	1976	1978	1980
TOTAL	794	1216	1664	2301	2855	3434	3503	3147	2634	2423	2479
U.S.	607 76.4	930 76.5	1288 77.4	1690 73.4	2105 73.7	2514 73.2	2330 66.5	1752 55.7	1557 54.9	1261 52.0	1254 50.6
NON-U.S. TOTAL	183 23.0	278 22.9	356 21.4	529 23.0	709 24.8	901 26.2	1141 32.6	1219 38.7	1203 42.4	1093 45.1	1149 46.3
NON-U.S., PERMANENT	54 6.8	60 4.9	105 6.6	144 6.3	273 9.6	430 12.5	622 17.8	515 16.4	390 13.8	325 13.4	299 12.1
NON-U.S., TEMPORARY	129 16.2	218 17.9	247 14.8	385 16.7	436 15.3	471 13.7	519 14.8	704 22.4	813 28.7	768 31.7	850 34.3
UNKNOWN	4 .5	8 .7	20 1.2	82 3.6	41 1.4	19 .6	32 .9	176 5.6	74 2.6	69 2.8	76 3.1

- BIOLOGICAL SCIENCES

TOTAL	1182	1300	1581	1991	2626	3171	3323	3201	3254	3196	3411
U.S.	990 83.8	1077 82.8	1240 77.7	1615 81.1	2148 81.8	2657 83.8	2767 83.3	2548 79.6	2728 83.8	2710 84.8	2945 86.3
NON-U.S. TOTAL	183 15.5	210 16.2	285 18.3	347 17.4	445 17.1	491 15.5	485 14.6	517 16.2	438 13.5	403 12.6	391 11.5
NON-U.S., PERMANENT	38 3.2	23 1.8	53 3.4	62 3.1	117 4.5	157 5.0	201 6.0	182 5.7	144 4.4	130 4.1	125 3.7
NON-U.S., TEMPORARY	145 12.3	187 14.4	236 14.9	285 14.3	332 12.6	334 10.5	284 8.5	335 10.5	294 9.0	273 8.5	266 7.8
UNKNOWN	9 .8	13 1.0	32 2.0	29 1.5	29 1.1	23 .7	71 2.1	136 4.2	88 2.7	83 2.6	75 2.2

- MEDICAL SCIENCES

TOTAL	133	205	263	318	397	488	613	631	676	683	842
U.S.	111 83.5	160 78.0	207 78.7	239 75.2	308 77.6	364 74.6	459 74.9	450 71.3	531 78.6	565 82.7	670 79.6
NON-U.S. TOTAL	21 15.8	43 21.0	53 20.2	76 23.9	85 21.4	115 23.6	129 21.0	124 19.7	122 18.0	97 14.2	154 18.3
NON-U.S., PERMANENT	2 1.5	13 6.3	11 4.2	17 5.3	28 7.1	34 7.0	66 10.8	65 10.3	52 7.7	35 5.1	59 7.0
NON-U.S., TEMPORARY	19 14.3	30 14.6	42 16.0	59 18.6	57 14.4	81 16.6	63 10.3	59 9.4	70 10.4	62 9.1	95 11.3
UNKNOWN	1 .8	2 1.0	3 1.1	3 .9	4 1.0	9 1.8	25 4.1	57 9.0	23 3.4	21 3.1	18 2.1

- AGRICULTURAL SCIENCES

TOTAL	414	470	517	576	684	918	1016	1002	950	1012	1072
U.S.	306 73.9	340 72.3	363 70.2	375 65.1	438 64.0	632 68.8	636 62.6	571 57.0	592 62.3	620 61.3	666 62.1
NON-U.S. TOTAL	107 25.8	130 27.7	152 29.4	190 33.0	237 34.6	283 30.8	374 36.8	406 40.5	347 36.5	375 37.1	391 36.5
NON-U.S., PERMANENT	16 3.9	18 3.8	17 3.3	15 2.6	41 6.0	51 5.6	93 9.2	73 7.3	44 4.6	46 4.5	42 3.9
NON-U.S., TEMPORARY	91 22.0	112 23.8	135 26.1	175 30.4	196 28.7	232 25.3	281 27.7	333 33.2	303 31.9	325 32.5	345 32.6
UNKNOWN	1 .2		2 .4	11 1.9	9 1.3	3 .3	6 .6	25 2.5	11 1.2	17 1.7	15 1.4

TEXT TABLE D. CONTINUED

- PROFESSIONAL FIELDS

CITIZENSHIP		YEAR OF DOCTORATE											
		1960	1962	1964	1966	1968	1970	1972	1974	1976	1978	1980	
TOTAL			381	468	565	734	948	1215	1532	1420	1479	1455	1345
U.S.		337	396	468	606	766	984	1270	1129	1219	1169	1090	
	V 1/	88.5	84.6	82.8	82.6	80.8	81.0	82.9	79.5	82.4	80.3	81.0	
NON-U.S. TOTAL			33	62	78	93	149	190	202	226	260	207	
	V	9.7	13.2	13.8	12.7	15.7	15.6	13.2	14.2	15.3	17.9	15.4	
NON-U.S., PERMANENT			7	12	18	27	57	63	75	63	62	64	62
	V	1.8	2.6	3.2	3.7	6.0	5.2	4.9	4.4	4.2	4.4	4.6	
NON-U.S., TEMPORARY			26	50	60	66	92	127	127	139	164	196	145
	V	6.8	10.7	10.6	9.0	9.7	10.5	8.3	9.8	11.1	13.5	10.8	
UNKNOWN			11	10	19	35	33	41	60	89	34	26	48
	V	2.9	2.1	3.4	4.8	3.5	3.4	3.9	6.3	2.3	1.8	3.6	

- EDUCATION

TOTAL		1549	1893	2351	3040	4029	5857	7085	7241	7725	7194	7576
U.S.		1461	1788	2196	2875	3736	5540	6600	6558	7114	6498	6720
	V	94.3	94.5	93.5	94.6	92.7	94.6	93.2	90.6	92.1	90.3	88.7
NON-U.S. TOTAL		80	98	136	136	238	273	415	404	460	540	619
	V	5.2	5.2	5.8	4.5	5.9	4.7	5.9	5.6	6.0	7.5	8.2
NON-U.S., PERMANENT		8	16	16	31	54	72	131	102	114	128	112
	V	.5	.8	.7	1.0	1.3	1.2	1.8	1.4	1.5	1.8	1.5
NON-U.S., TEMPORARY		72	82	120	105	184	201	284	302	346	412	507
	V	4.6	4.3	5.1	2.5	4.6	3.4	4.0	4.2	4.5	5.7	6.7
UNKNOWN		8	7	16	29	55	44	70	279	151	156	237
	V	.5	.4	.7	1.0	1.4	.8	1.0	3.5	2.0	2.2	3.1

have been the geographic areas with the largest number of citizens earning doctorates in the U.S. In 1980, the Asian geographic areas accounted for nearly 44% of the total foreign doctorate recipients.

India, Taiwan, and Canada are shown in Text Table E to have been the largest source countries for doctorate recipients during the 1960-1980 period and, by 1980, Taiwan had replaced India as the largest source of foreign Ph.D.'s. Four countries - Brazil, Iran, Hong Kong, and Thailand - have also had large increases in the number of doctorates in each of the five years displayed in Table E. Of these, the country with the largest proportional growth was Brazil, where the number of doctorates in 1980 was 39 times the number in 1960.

Europe, followed by East and West Asia, were the regions with the largest proportion of citizens earning Ph.D.'s who held permanent visas. The countries having the largest proportion of citizens with permanent visas between 1960 and 1980 were

Germany, Taiwan, and England. The Pacific, the African, and the Mexico, Central and South American regions had the largest proportion of temporary visa Ph.D.'s - nearly one-quarter more than the average proportion for this period.

Source of Support in Graduate School

The primary source of financial support for graduate study reported by the 1980 doctorate recipients, both U.S. citizens and non-U.S., is shown in Figure 6 and Text Table F. The most commonly reported source of support was Own Earnings (21.9%) followed by Teaching Assistantship (17.6%) and Research Assistantship (16.1%). The three sources of financial support administered through the university - University Fellowship, Teaching Assistantship, and Research Assistantship - represented the primary support for 39.2% of the Ph.D.'s. As shown in Figure 6, among non-U.S. citizens, the permanent and temporary visa holders were the groups most dependent on support from university sources (55.2% and 45.3% respectively).

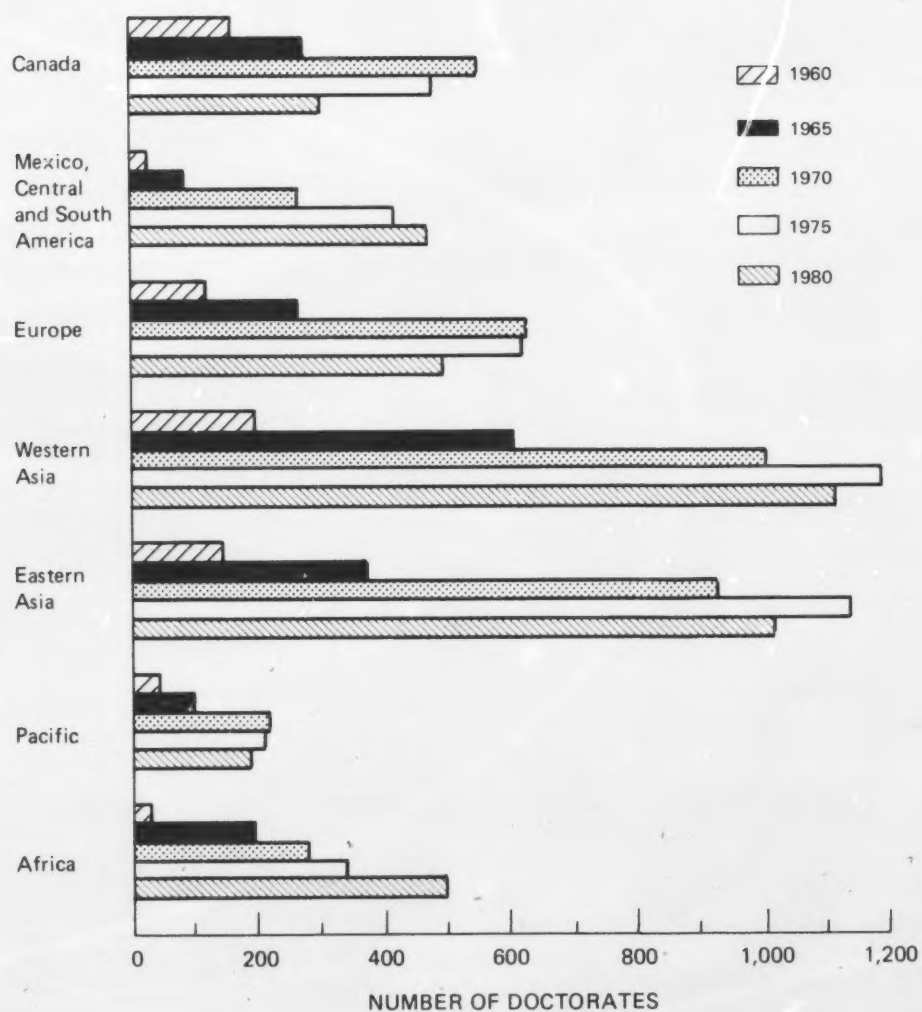


FIGURE 5
Geographic Area of Citizenship of Non-U.S. Citizen Doctorate Recipients, 1960-1980

TEXT TABLE E
COUNTRY OF CITIZENSHIP OF 1960-1980 NON-U.S. CITIZEN DOCTORATE RECIPIENTS.

COUNTRY OF CITIZENSHIP		YEAR OF DOCTORATE AND VISA STATUS											
		1960 TOTAL	PERM- ANENT	TEMP- ORARY	1965 TOTAL	PERM- ANENT	TEMP- ORARY	1970 TOTAL	PERM- ANENT	TEMP- ORARY	1975 TOTAL	PERM- ANENT	TEMP- ORARY
TOTAL NON-U.S. CITIZENS	H ^{1/}	1176	275	897	2313	560	1753	4148	1576	2572	5250	1714	3536
			23.7	76.3		24.2	75.8		38.0	62.0		32.6	67.4
CANADA	H	162	40	122	270	50	220	533	149	384	482	81	401
			24.7	75.3		18.5	81.5		28.0	72.0		16.8	83.2
MEXICO/CENT./SO. AMER., TOTAL	H	37	8	29	92	15	77	277	79	198	421	75	346
			21.6	78.4		16.3	83.7		28.5	71.5		17.8	82.2
MEXICO	H	10		10	18		18	31	2	29	52	7	45
				100.0			100.0		6.5	93.5		13.5	86.5
BRAZIL	H	4	1	3	12	2	10	36	7	29	59	3	96
			25.0	75.0		16.7	83.3		19.4	80.6		3.0	97.0
EUROPE, TOTAL	H	129	61	68	273	95	178	636	287	349	629	201	428
			47.3	52.7		34.8	65.2		45.1	54.9		32.0	68.0
ENGLAND	H	37	15	22	92	38	54	225	109	116	172	65	107
			40.5	59.5		41.3	58.7		48.4	51.6		37.8	62.2
GERMANY	H	22	12	10	36	8	28	76	41	35	74	32	42
			54.5	45.5		22.2	77.8		53.9	46.1		43.2	56.8
GREECE	H	16	2	14	26	9	17	65	33	32	60	23	37
			12.5	87.5		34.6	65.4		50.8	49.2		38.3	61.7
WESTERN ASIA, TOTAL	H	201	22	179	611	51	560	1092	383	709	1192	308	884
			10.9	89.1		8.3	91.7		35.1	64.9		25.8	74.2
INDIA	H	123		116	390	24	366	574	237	337	659	195	464
			5.7	94.3		6.2	93.8		41.3	58.7		29.6	70.4
IRAN	H	16	6	10	28	5	23	95	31	64	124	35	89
			37.5	62.5		17.9	82.1		32.6	67.4		28.2	71.8
ISRAEL	H	18	2	16	45	7	38	109	35	74	119	23	96
			11.1	88.9		15.6	84.4		32.1	67.9		19.3	80.7
PAKISTAN	H	11	1	10	53	2	51	112	17	95	63	16	47
			9.1	90.9		3.8	96.2		15.2	84.8		25.4	74.6
TURKEY	H	5		5	21	4	17	54	17	37	100	13	87
				100.0		19.0	81.0		31.5	68.5		13.0	87.0
EASTERN ASIA, TOTAL	H	147	25	122	387	54	333	928	476	452	1143	384	759
			17.0	83.0		14.0	86.0		51.3	48.7		33.6	66.4
TAIWAN, ROC	H	77	15	58	197	36	161	562	360	202	572	259	313
			24.7	75.3		18.3	81.7		64.1	35.9		45.3	54.7
HONG KONG	H					1	3	43	11	32	97	16	81
						25.0	75.0		25.6	74.4		16.5	83.5
JAPAN	H	30	3	27	60	6	54	100	19	81	109	9	100
			10.0	90.0		10.0	90.0		19.0	81.0		8.3	91.7
SOUTH KOREA	H	24	2	22	84	10	74	150	71	79	190	85	105
			8.3	91.7		11.9	88.1		47.3	52.7		44.7	55.3
THAILAND	H	13	1	12	19	1	18	38	2	36	103	6	97
			7.7	92.3		5.3	94.7		5.3	94.7		5.8	94.2
PACIFIC, TOTAL	H	55	6	49	107	6	101	220	45	175	217	28	189
			10.9	89.1		5.6	94.4		20.5	79.5		12.9	87.1
AUSTRALIA	H	13	2	10	38	3	35	86	24	62	83	8	75
			23.1	76.9		7.9	92.1		27.9	72.1		9.6	90.4
THE PHILIPPINES	H	24	1	23	35	1	34	90	12	78	68	10	58
			4.2	95.8		2.9	97.1		13.3	86.7		14.7	85.3
AFRICA, TOTAL	H	34	2	32	197	17	180	286	65	221	337	78	259
			5.9	94.1		8.6	91.4		22.7	77.3		23.1	76.9
NIGERIA ^{2/}	H										113	24	89
												21.2	78.8
EGYPT	H	17	1	16	130	11	119	127	37	90	64	34	30
			5.9	94.1		8.5	91.5		29.1	70.9		53.1	46.9
COUNTRY UNKNOWN	H	411	115	296	376	272	104	176	92	84	829	559	270
			28.0	72.0		72.3	27.7		52.3	47.7		67.4	32.6

^{1/} H provides horizontal percentage within each year grouping.

^{2/} Nigeria was first coded as a separate country of citizenship in 1973.

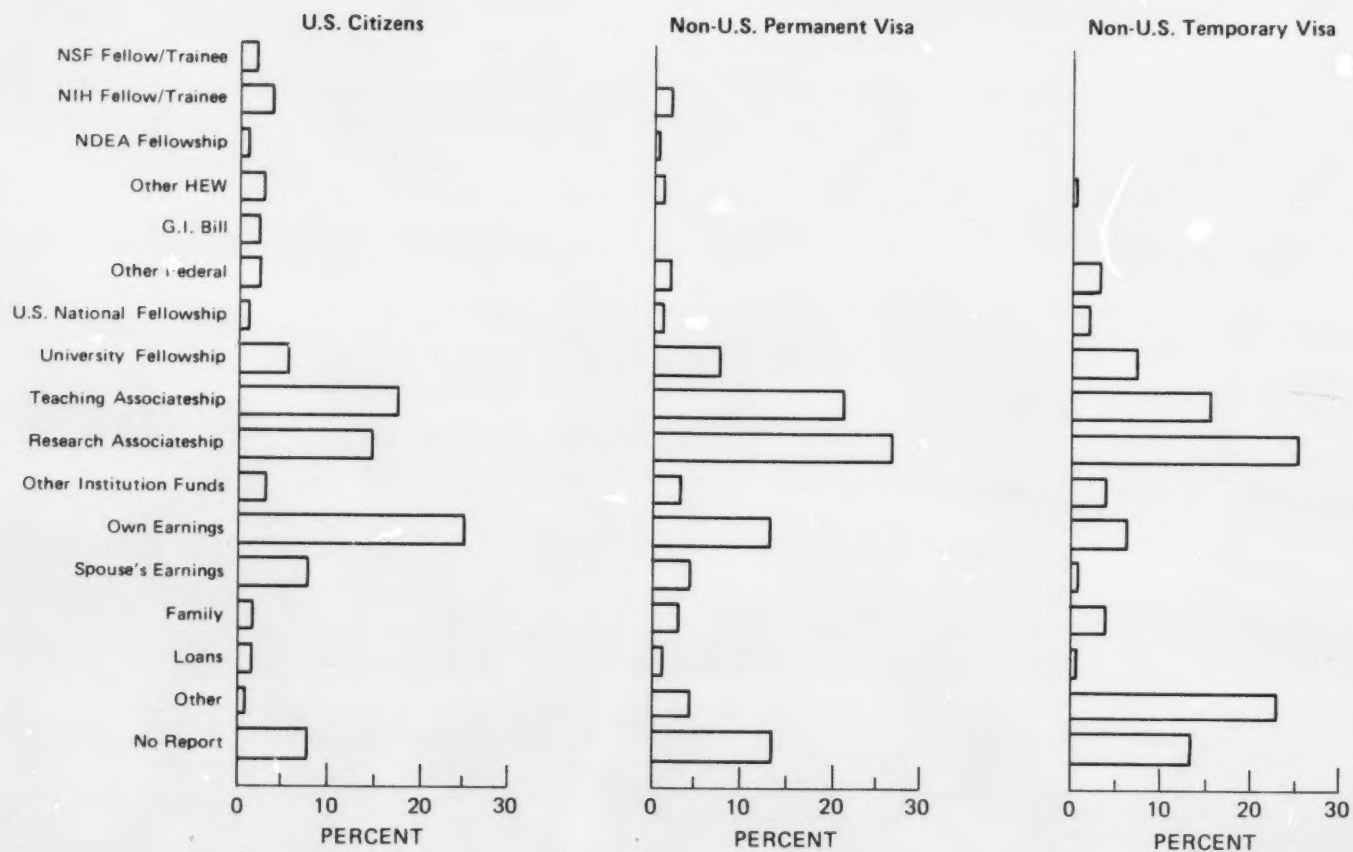


FIGURE 6
Primary Source of Support and Citizenship Status, 1980

TEXT TABLE F
PRIMARY SOURCE OF SUPPORT IN GRADUATE SCHOOL FOR 1960 DOCTORATE RECIPIENTS BY
CITIZENSHIP AND FIELD OF DEGREE ^{1/}

SOURCE OF SUPPORT ^{2/}		FIELD OF DOCTORATE AND CITIZENSHIP STATUS														
		TOTAL			PHYSICAL SCIENCES			ENGINEERING			BIOLOGICAL SCIENCES			OTHER LIFE SCIENCES		
		U.S. CIT.	NON-U.S. PERM.	TEMP.	U.S. CIT.	NON-U.S. PERM.	TEMP.	U.S. CIT.	NON-U.S. PERM.	TEMP.	U.S. CIT.	NON-U.S. PERM.	TEMP.	U.S. CIT.	NON-U.S. PERM.	TEMP.
NSF FELLOW/TRAINEE	V ^{3/}	447 1.8			147 4.8			54 4.3			105 3.6			11 .8		
NIH FELLOW/TRAINEE	V	1210 4.8	22 1.7		46 1.5	7 2.8		29 2.3	1 .3		627 21.3	6 4.8		168 12.6	3 3.0	
NDEA FELLOWSHIP	V	227 .9	1 .1		7 .2			4 .3			3 .1			1 .1		
OTHER HEW	V	563 2.2	9 .7	4 .1	16 .5			11 .9	2 .7	1 .1	53 1.8	2 1.6		49 3.7	1 1.0	1 .2
GI BILL	V	507 2.0		1	30 1.0			19 1.5		1 .1	44 1.5			20 1.5		
OTHER FEDERAL SUPPORT	V	525 2.1	18 1.4	92 2.5	92 3.0	1 .4	15 2.2	92 7.3	11 3.7	17 2.0	55 1.9		2 .8	48 3.6	2 2.0	14 3.2
OTHER U.S. NATIONAL FELLOWSHIP	V	227 .9	10 .8	55 1.5	13 .4	1 .4	6 .9	4 .3	2 .7	6 .7	9 .3		4 1.5	3 .2		12 2.7
UNIVERSITY FELLOWSHIP	V	1294 5.2	90 7.0	233 6.4	148 4.8	19 7.5	38 5.5	55 4.4	8 2.7	41 4.8	155 5.3	10 8.0	24 9.0	37 2.8	7.9	20 4.5
TEACHING ASSISTANTSHIP	V	4478 17.8	270 21.6	548 15.1	839 27.3	79 31.3	210 30.5	104 8.3	34 11.4	92 10.8	592 20.1	28 22.4	37 13.9	98 7.3	13 12.9	11 2.5
RESEARCH ASSISTANTSHIP	V	3633 14.5	350 27.2	863 23.8	1123 36.6	80 31.7	206 29.9	467 37.2	155 51.8	392 46.1	634 21.5	33 26.4	78 29.3	464 34.7	46 45.5	84 18.9
OTHER INSTITUTIONAL FUNDS	V	680 2.7	35 2.7	130 3.6	74 2.4	5 2.0	12 1.7	83 6.6	8 2.7	19 2.2	63 2.1	9 7.2	9 3.4	40 3.0	3 3.0	34 7.7
OWN EARNINGS	V	6197 24.7	163 12.7	221 6.1	178 5.8	5 2.0	6 .9	187 14.9	19 6.4	22 2.6	155 5.3	10 8.0	9 3.4	161 12.1	12 11.9	20 4.5
SPOUSE'S EARNINGS	V	2164 8.6	51 4.0	33 .9	146 4.8	9 3.6	1 .1	42 3.3	5 1.7	4 .5	186 6.3	4 3.2	2 .8	104 7.8	3 3.0	5 1.1
FAMILY CONTRIBUTIONS	V	421 1.7	35 2.7	128 3.5	9 .3	1 .4	5 .7	5 .4	7 2.3	19 2.2	22 .7	1 .8	4 1.5	8 .6	2 2.0	12 2.7
LOANS	V	375 1.5	14 1.1	17 .5	1 .4		3 .4	2 .2	3 1.0	2 .2	15 .5		1 .4	9 .7		3 .7
OTHER	V	264 1.1	51 4.0	830 22.9	11 .4	8 3.2	90 13.1	11 .9	16 5.4	143 16.8	22 .7	3 2.4	67 25.2	15 1.1	2 2.0	179 40.3
NO PRIMARY SUPPORT REPORTED	V	1896 7.6	167 13.0	477 13.1	188 6.1	37 14.7	96 14.0	85 6.8	28 9.4	91 10.7	205 7.0	19 15.2	29 10.9	100 7.5	6 5.9	49 11.0
TOTAL		25108	1286	3632	3068	252	688	1254	299	850	2945	125	266	1336	101	444

^{1/} Not included in this table are the 956 doctorate recipients who did not report citizenship status.

^{2/} See item 15 on page 41 for listing of support sources. Here, the category Other HEW includes Title IX G*POP Fellowship, Other Federal Support includes AEC/ERDA Fellowship and NASA Traineeship, Other U.S. National Fellowship includes Woodrow Wilson Fellowship, Other Institutional Funds includes Educational Funds of Business or Industry, and the category Loans includes NDSL and Other Loans.

^{3/} V provides vertical percentages within columns based on total Ph.D.'s.

TEXT TABLE F. CONTINUED

SOURCE OF SUPPORT ^{2/}		FIELD OF DOCTORATE AND CITIZENSHIP STATUS											
		SOCIAL SCIENCES			HUMANITIES			PROFESSIONAL FIELDS			EDUCATION		
		U.S. CIT.	NON-U.S. PERM.	TEMP.	U.S. CIT.	NON-U.S. PERM.	TEMP.	U.S. CIT.	NON-U.S. PERM.	TEMP.	U.S. CIT.	NON-U.S. PERM.	TEMP.
NSF FELLOW/TRAINEE	V ^{3/}	105			13			1			11		
		2.0			.4			.1			.2		
NIM FELLOW/TRAINEE	V	309	5		2			13			16		
		5.8	2.5		.1			1.2			.2		
NDEA FELLOWSHIP	V	51			131			7			23	1	
		1.0			3.9			.6			.3	.9	
OTHER NEW	V	183	1	2	8	1		53	1		189	1	
		3.5	.5	.4	.2	.7		4.9	1.6		2.8	.9	
GI BILL	V	112			74			27			180		
		2.1			2.2			2.5			2.7		
OTHER FEDERAL SUPPORT	V	132	2	21	19		7	25		4	62	2	12
		2.5	1.0	4.0	.6		3.4	2.3		2.8	.9	1.8	2.4
OTHER U.S. NATIONAL FELLOWSHIP	V	67	5	14	82	1	6	7			42	1	7
		1.3	2.5	2.7	2.4	.7	2.9	.6			.6	.9	1.4
UNIVERSITY FELLOWSHIP	V	302	25	58	373	16	19	40	2	20	182	2	12
		5.7	12.5	11.0	11.1	11.9	9.3	3.7	3.2	13.8	2.7	1.8	2.4
TEACHING ASSISTANTSHIP	V	971	38	78	1043	44	52	213	16	20	617	18	48
		18.3	19.0	14.8	30.9	32.8	25.4	19.5	25.8	13.8	9.2	16.1	9.5
RESEARCH ASSISTANTSHIP	V	520	17	42	42	1	9	71	9	15	309	9	37
		9.8	8.5	8.0	1.2	.7	4.4	6.5	14.5	10.3	4.6	8.0	7.3
OTHER INSTITUTIONAL FUNDS	V	110	3	23	59	2	10	32	1	6	217	3	17
		2.1	1.5	4.4	1.7	1.5	4.9	2.9	1.6	4.1	3.2	2.7	3.4
OWN EARNINGS	V	1125	39	33	664	23	15	347	21	20	3373	34	96
		21.2	19.5	6.3	19.7	17.2	7.3	31.8	33.9	13.8	50.2	30.4	18.9
SPOUSE'S EARNINGS	V	514	9	9	394	11	2	121	2	1	654	8	9
		9.7	4.5	1.7	11.7	8.2	1.0	11.1	3.2	.7	9.7	7.1	1.8
FAMILY CONTRIBUTIONS	V	156	10	32	107	3	11	13	2	11	101	9	34
		2.9	5.0	6.1	3.2	2.2	5.4	1.2	3.2	7.6	1.5	8.0	6.7
LOANS	V	143	2	3	45	4	1	7		2	153	5	2
		2.7	1.0	.6	1.3	3.0	.5	.6		1.4	2.3	4.5	.4
OTHER	V	65	10	127	43	6	42	25	1	34	72	5	148
		1.2	5.0	24.1	1.3	4.5	20.5	2.3	1.6	23.4	1.1	4.5	29.2
NO PRIMARY SUPPORT REPORTED	V	433	34	84	275	22	31	88	7	12	519	14	85
		8.2	17.0	16.0	8.2	16.4	15.1	8.1	11.3	8.3	7.7	12.5	16.8
TOTAL		5298	200	526	3374	134	205	1090	62	145	6720	112	507

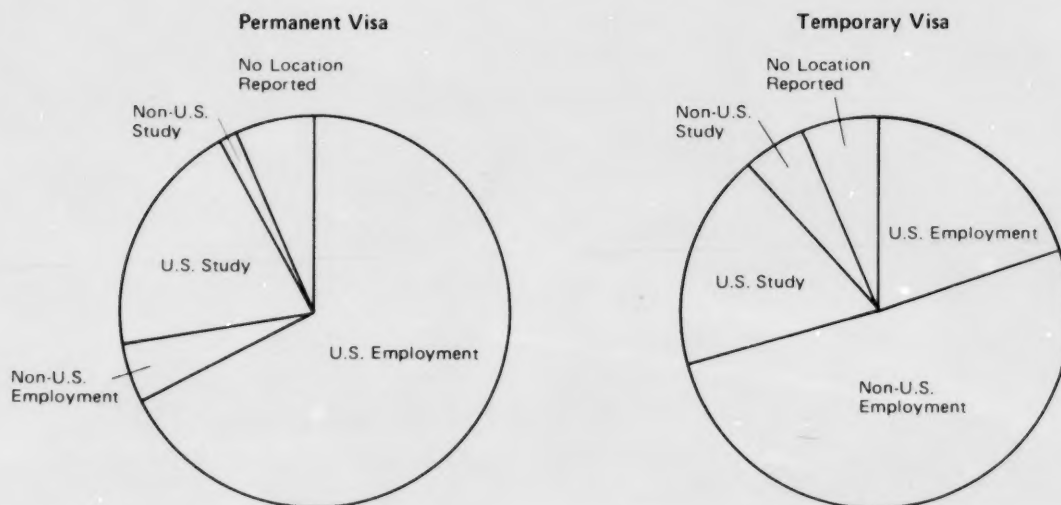


FIGURE 7

Planned Location for Non-U.S. Citizen Doctorate Recipients with Definite Employment or Study Commitments, 1980

The U.S.-citizen Ph.D.'s were the group most frequently reporting use of their own earnings for graduate school support (24.7%), a proportion nearly twice as great as that of the permanent visa holders and four times as great as that of the temporary group. The Other source of support was noted by 22.9% of the temporary visa holders - a much higher proportion than for the other two citizenship groups. Review of the written-in responses to this item show that foreign Ph.D.'s typically use the Other category to denote support from their home countries.

Support from university sources was reported by a higher proportion of doctorates in the physical sciences than by Ph.D.'s in the other fields shown in Text Table F. At the same time, Own Earnings was reported as the primary source of support by a smaller proportion of physical science Ph.D.'s than by doctorates in all other fields. For engineers, the Research Assistantship was the most frequently noted source of support. A higher proportion of Ph.D. engineers checked Other Federal and Other Institutional Funds as their primary support than did doctorates in the other fields.

NIH support was most often reported by U.S. citizen Ph.D.'s in the biological sciences. In the other life science fields, two-fifths of the

temporary visa holders were supported by Other sources, the largest proportion for any field and about twice the average proportion reported by the temporary visa group. Of all science fields, a larger proportion of doctorate recipients in the social sciences used their Own Earnings as the source of primary support for graduate study.

Doctorate recipients in humanities fields had both the highest proportion receiving primary support from University Fellowships and Teaching Assistantships (11.0% and 30.7% respectively), and the lowest proportion reporting support from Research Assistantships (1.4%). Own Earnings was the source most frequently checked by U.S. citizens and permanent visa doctorate recipients in the professional fields and in education. For temporary visa holders in these fields, the Other source of support was most frequently reported.

Postdoctoral Employment and Study Plans

Text Table G presents a summary of data from questions 17, 18, and 20 on the postdoctoral employment and study plans for 1980 non-U.S. citizen doctorate recipients. As might be expected, the planned postdoctoral employment location of foreign citizens is highly dependent on their visa status. A total of 87.4% of the doctorates holding permanent

TEXT TABLE G
POSTDOCTORAL EMPLOYMENT AND STUDY PLANS OF 1980 NON-U.S. CITIZEN DOCTORATE
RECIPIENTS BY FIELD OF DEGREE.

POSTDOCTORAL PLANS		FIELD OF DOCTORATE															
		TOTAL ALL FLOS.	PHYS & ASTR.	CHEM.	EARTH ENV. & MAR. SCI.	MATH	COMP. SCI.	ENGR.	BIOLOGICAL SCI.	MED. AGRIC. SCI.	PSYCH	ECON.	ALL OTHER SCI.	FOR LANG. LIT.	ALL OTHER HUM.	PROP. FLOS.	EDUC.
NON-U.S. CITIZENS																	
WITH PERMANENT VISAS																	
TOTAL EMPLOYED	V1 1/	1286 72.9	31 45.1	99 55.6	26 46.2	63 77.8	13 100.0	299 90.0	125 22.4	59 44.1	42 64.3	50 76.0	53 92.5	97 79.4	52 84.6	82 85.4	112 85.7
DEFINITE EMPLOYMENT	V1	625 48.6	19 37.3	37 37.4	9 34.6	31 49.2	11 84.6	211 70.6	16 12.8	23 39.0	19 45.2	25 50.0	31 56.5	36 37.1	17 32.7	44 53.7	49 74.2
LOCATION-U.S.	V1	546 42.5	19 37.3	34 34.3	8 30.8	29 46.0	10 76.9	187 62.5	13 10.4	20 33.9	13 31.0	24 48.0	24 45.3	30 30.9	15 28.8	38 46.3	39 67.7
-NON-U.S.	V1	37 2.9		1 1.0	1 3.8	2 3.2		3 1.0	2 1.6	3 5.1	4 9.5		5 9.4	4 4.1	1 1.9	4 4.9	4 3.6
EMPLOYER-ED. INST.	V1	261 20.3	1 2.0	3 3.0	3 11.5	19 30.2	4 30.8	30 10.0	9 7.2	11 18.6	8 19.0	10 20.0	16 30.2	23 23.7	17 32.7	33 40.2	34 64.5
-IND/BUS.	V1	286 22.2	17 33.3	32 32.3	5 19.2	9 14.3	7 53.8	166 55.5	5 4.0	8 13.6	10 23.8	4 8.0	4 7.5	7 7.2		4 4.9	4 3.6
-GOVT.	V1	30 2.3	1 2.0		1 3.8	1 1.6		8 2.7	1 .8	1 1.7		5 10.0	3 5.7	3 3.1		2 2.4	4 3.6
-ALL OTHER	V1	48 3.7		2 2.0		2 3.2		7 2.3	1 .8	3 5.1	1 2.4	6 12.0	8 15.1			5 6.1	7 4.8
SEEKING EMPLOYMENT	V1	312 24.3	4 7.8	18 18.2	3 11.5	18 28.6	2 15.4	58 19.4	12 9.6	3 5.1	8 19.0	13 26.0	18 34.0	41 42.3	27 51.9	26 31.7	47 22.6
TOTAL POSTDOCT'L STUDY	V1	310 24.1	26 51.0	44 44.4	13 50.0	12 19.0		26 8.7	92 73.6	32 54.2	13 31.0	11 22.0	3 5.7	13 13.4	3 5.8	10 12.2	11 1.6
DEFINITE STUDY	V1	183 14.2	17 33.3	26 26.3	10 38.5	9 14.3		12 4.0	60 48.0	18 30.5	8 19.0	6 12.0	1 1.9	5 5.2		5 6.1	5 4.5
LOCATION-U.S.	V1	161 12.5	14 27.5	26 26.3	10 38.5	5 7.9		11 3.7	54 43.2	18 30.5	6 14.3	6 12.0	1 1.9	3 3.1		2 2.4	4 1.6
-NON-U.S.	V1	13 1.0	3 5.9			2 3.2		1 .3	2 1.6		2 4.8		1 1.0			2 2.4	
SEEKING STUDY	V1	127 9.9	9 17.6	18 18.2	3 11.5	3 4.8		14 4.7	32 25.6	14 23.7	5 11.9	5 10.0	2 3.8	8 8.2	3 5.8	5 6.1	6 5.4
WITH TEMPORARY VISAS																	
TOTAL EMPLOYED	V2 2/	2544 70.0	61 32.3	94 39.7	45 56.3	96 69.1	54 79.1	603 70.9	108 40.6	56 58.9	267 76.5	47 66.2	174 90.6	222 86.4	28 80.3	139 93.1	435 85.8
DEFINITE EMPLOYMENT	V2	1828 50.3	40 21.2	57 24.1	34 42.5	66 47.5	27 62.8	434 51.1	86 32.3	48 50.5	213 61.0	30 42.3	132 68.8	148 56.3	13 40.6	97 56.1	297 73.1
LOCATION-U.S.	V2	472 13.0	12 6.3	20 8.4	8 10.0	31 22.3	18 41.9	230 27.1	5 1.9	5 5.3	13 3.7	12 16.9	31 16.1	21 8.0	4 12.5	13 7.5	15 23.4
-NON-U.S.	V2	1238 34.1	25 13.2	32 13.5	24 30.0	30 21.6	7 16.3	179 21.1	77 28.9	38 40.0	186 53.3	18 25.4	95 49.5	116 44.1	8 25.0	77 44.5	260 51.3
EMPLOYER-ED. INST.	V2	1117 30.8	24 12.7	30 12.7	17 21.3	50 36.0	15 34.9	184 21.6	58 21.8	38 40.0	107 30.7	24 33.8	80 41.7	98 37.3	13 40.6	78 45.1	228 50.3
-IND/BUS.	V2	281 7.7	10 5.3	17 7.2	11 13.8	7 9.0	12 27.9	183 21.5	1 .4	1 1.1	9 2.8		8 3.1	6 2.3		3 1.7	3 8.3
-GOVT.	V2	320 8.8	6 3.2	7 3.0	6 7.5	7 9.0		58 6.8	23 8.6	9 9.5	75 21.5	2 2.8	25 13.0	34 12.9		7 4.0	51 6.9
-ALL OTHER	V2	110 3.0		3 1.3		2 1.4		9 1.1	4 1.5		22 6.3	4 5.6	21 10.9	10 3.8		9 5.2	15 3.0
SEEKING EMPLOYMENT	V2	716 19.7	21 11.1	37 15.6	11 13.8	30 21.6	7 16.3	169 19.9	22 8.3	8 8.4	54 15.5	17 23.9	42 21.9	74 28.1	15 46.9	42 24.3	138 27.2
TOTAL POSTDOCT'L STUDY	V2	887 24.4	121 64.0	136 57.4	29 36.3	32 23.0	9 20.9	204 24.0	147 55.3	31 32.6	55 15.8	13 18.3	12 6.3	27 10.3	2 6.3	23 13.3	38 7.5
DEFINITE STUDY	V2	577 15.9	85 45.0	96 40.5	20 25.0	17 12.2	4 9.3	137 16.1	96 36.1	25 26.3	26 7.4	10 14.1	9 4.7	14 5.3	1 3.1	14 8.1	20 3.9
LOCATION-U.S.	V2	429 11.8	63 33.3	84 35.4	14 17.5	11 7.9	4 9.3	115 13.5	74 27.8	21 22.1	10 2.9	7 9.9	6 3.1	4 2.3	1 3.1	3 1.7	9 1.8
-NON-U.S.	V2	121 3.3	22 11.6	7 3.0	6 7.5	6 4.3		15 1.8	16 6.0	2 2.1	13 3.7	2 2.8	3 1.6	8 3.0		10 5.8	9 1.4
SEEKING STUDY	V2	310 8.5	36 19.0	40 16.9	9 11.3	15 10.8	5 11.6	67 7.9	51 19.2	4 6.3	29 8.3	3 4.2	3 1.6	13 4.9	1 3.1	9 5.2	18 3.6

1/ V1 provides vertical percentages within columns based on total non-U.S. citizens with permanent visas.

2/ V2 provides vertical percentages based on total non-U.S. citizens with temporary visas.

visas have obtained commitments for U.S. employment. Among those with temporary visa status, the majority, 67.7%, have indicated a foreign employment location, and only 25.8% expect to be employed in the U.S. (see Figure 7).

The type of employment anticipated following the doctorate also differed between the two groups of non-U.S. citizens. Among the foreign doctorate recipients with firm commitments for employment, the leading type of employer for those with permanent visas was industry or business (45.8%), whereas the majority of those holding temporary visas planned employment in academe (61.1%). Only 41.8% of the individuals with permanent visa status indicated commitments for academic employment.

The proportion of both permanent and temporary visa holders reporting plans for continued study following the doctorate is one-third greater than for U.S. citizen doctorate recipients^{5/}. In contrast to the large difference between the planned

employment location for permanent and temporary visa holders, the planned postdoctoral study location for the two groups is quite similar - 88.0% of the permanent visa Ph.D.'s and 74.4% of the temporary visa holders planned study in the U.S.

Among those planning employment, the field of medical sciences has the largest proportion with definite employment plans for both the permanent (88.4%) and the temporary visa (85.7%) groups. For those planning further study, this field also has the largest proportion (80.7%) of temporary visa citizens with definite study plans. The biological sciences has the largest proportion of doctorate recipients seeking study for both the permanent (25.6%) and the temporary groups (19.2%), while the largest proportions seeking employment are in foreign languages and literature - 51.9% of permanent visa Ph.D.'s and 46.9% of the temporary group.

^{5/}Data for U.S. citizens can be found in Table 5, pp.38-39.

EXPLANATION OF FIVE BASIC TABLES

Table 1 - Number of Doctorate Recipients by Sex and Subfield, FY 1980

Table 1A - Number of Doctorate Recipients by Citizenship, Racial/Ethnic Group, and Subfield, FY 1980

Table 2 - Statistical Profile of Doctorate Recipients by Sex and by Field of Doctorate, FY 1980 (three tables)

Table 3 - Percentage of FY 1980 Doctorate Recipients by Sources of Support in Graduate School, by Sex and Summary Field

Table 4 - Number of FY 1980 Doctorate Recipients by Sex, State of Doctoral Institution, and Summary Field

Table 5 - Statistical Profile of Doctorate Recipients by Racial or Ethnic Group and U.S. Citizenship Status, FY 1980

Table titles and headings are generally self-explanatory, but a few terms need special definition or explanation. The survey questionnaire is reproduced on pages

Tables 1 and 1A:

Tables 1 and 1A display data by fine field of doctorate, corresponding to the fields specified in the Specialties List on page 42. The "general" field categories, e.g., "chemistry, general," contain individuals who either received the doctorate in the general subject area or who did not specify a particular fine field. The "other" field categories, e.g., "chemistry, other," include those individuals whose specified doctoral discipline was not listed in the Specialties List.

Table 2:

There are three 2-page tables; one contains data about all doctorate recipients in FY 1980 and the other two present data by sex. This table provides data by field and also by broader summary field. Refer to inside back cover for the codes included in each broad field and the Specialties List on page for the codes and names of each subfield.

"Median Age at Doctorate" -- One-half received the doctorate at this age or younger.

"Percentage with Master's" -- This indicates the percentage of doctorate recipients in a field who received a master's degree in any field before taking the doctorate.

"Median Time Lapse" -- "Total Time" refers to total calendar time elapsed between year of baccalaureate and year of doctorate; "Registered Time" refers to the total time registered in a university between baccalaureate and doctorate.

Postgraduation plans of the doctorate recipients are grouped as: "Postdoctoral Study Plans" (fellowship, research associateship, traineeship, other), "Planned Employment" (educational institution, industry, etc.), or "Postdoctoral Status Unknown." The sum of these columns of percentages totals 100% with allowance for rounding. For example, 3.2% of all the engineers plan to go to postdoctoral fellowships, 8.4% to research associateships, 1.3% to traineeships, 0.6% plan on some form of postdoctoral study support; 79.9% plan on employment and 6.6% did not indicate their postgraduation plans. The percentage listed by type of employer (educational institution, industry, etc.) total to the 79.9% planning on employment.

The four lines of data beginning with "Definite Postdoctoral Study," first included in the 1974 report, distinguish between individuals who have definite postgraduation plans (item S: "Have signed contract or made definite commitment" in the survey questionnaire) and those who are still seeking employment or postdoctoral study (item S: negotiating, seeking, or other). These four lines when added to the prior line "Status Unknown" total 100%. The two lines "Definite Postdoctoral Study" and "Seeking Postdoctoral Study" add to give the total percentage planning postdoctoral study listed in the table as "Postdoctoral Study Plans" and the two lines "Definite Employment" and "Seeking Employment" add to give the total percentage planning employment listed in the table as "Planned Employment After Doctorate."

Percentages showing the distribution of doctorate recipients by work activity and by region of employment are based on those who have a definite employment commitment. They exclude those still seeking employment and those planning postdoctoral study as

described in the categories above. These data differ from Summary Reports prior to 1974 which included all individuals planning on employment, i.e., those seeking as well as those having definite employment commitments.

Table 3:

Data in Table 3 describe sources of financial support during graduate school. The question was answered by 29,271 (94.5%) of the FY 1980 doctorate recipients. The data in the table should be interpreted as follows: 206 male doctorate recipients in the physical sciences reported financial support from NSF fellowships during graduate school. This number is 6.0% of the male physical sciences doctorates who answered the question, and it is 37.2% of the males in all fields who reported NSF fellowship support. Since students indicate multiple sources of support, the vertical percentages sum to more than 100%.

Changes in the survey questionnaire item on source of support have reduced the comparability of the 1977 to 1980 data with data presented in earlier Summary Reports. An explanation of the effects of these changes in Table 3 is detailed on page 13 of the 1977 Summary Report.

Table 4:

Table 4 shows the number of persons receiving a doctorate from universities in each of the 50 states, the District of Columbia, and Puerto Rico.

Table 5:

The 1973 Summary Report was the first to include data for racial and ethnic groups. The tables in that report stimulated many requests for more detailed data by individual racial or ethnic group. Such data are provided in Table 5, first included in the 1974 Summary Report. Table 5 contains data by racial or ethnic group and by U.S. citizenship

status for selected variables from Tables 2 and 3. Comparisons between the 1973 data and data for 1974 to 1975 are somewhat tenuous because of the large number of cases (8,592) for which racial or ethnic data were unavailable in 1973.

In 1977, the item on racial or ethnic group in the survey questionnaire was revised to coincide with the question format recommended by the Federal Interagency Committee on Education and adopted by the Office of Management and Budget (OMB) for use in federally-sponsored surveys. An explanation of the effects of these changes is detailed on page 13 of the 1977 Summary Report. Changes in the OMB guidelines prompted the moving of persons having origins in the Indian Subcontinent from the white category to Asian in 1978. In 1980, the category Hispanic was subdivided into Puerto Rican, Mexican-American, and Other Hispanic to provide more detail for users of the racial/ethnic data.

An additional revision to this item in 1980 involves the number of categories that may be checked. Prior to 1980, doctorate recipients could check as many categories as applied to indicate their racial/ethnic background. When compiling the data, all persons who checked "white" in addition to one other category, with the exception of "black", were included with those who had provided the single category response. Those whose responses were "black" and who gave one additional response to any other category were designated as "black". Beginning in 1980, respondents were asked to check only one category. Evidence of this change will be most pronounced in the "American Indian" group where the majority of the respondents formerly checked "white" in addition to "American Indian".

These changes can affect the continuity of the time series of all the racial/ethnic groups in the report.

TABLE 1
NUMBER OF DOCTORATE RECIPIENTS BY SEX AND SUBFIELD, FY 1980

SUBFIELD OF DOCTORATE	NUMBER OF DOCTORATES		
	MEN	WOMEN	TOTAL
TOTAL ALL FIELDS	21395	9387	30982
PHYSICAL SCIENCES	3612	502	4114
MATHEMATICS	650	95	745
ALGEBRA	63	15	78
ANALYSIS AND FUNCTIONAL ANALYSIS	83	8	91
GEOMETRY	33	2	35
LOGIC	22	2	24
NUMBER THEORY	25	3	28
PROBABILITY, MATH STATISTICS	126	26	152
TOPOLOGY	50	7	57
COMPUTING THEORY AND PRACTICE	13		13
OPERATIONS RESEARCH	36	5	41
APPLIED	93	9	102
MATHEMATICS, GENERAL	71	12	83
MATHEMATICS, OTHER	35	6	41
COMPUTER SCIENCES	197	21	218
PHYSICS AND ASTRONOMY	918	67	985
ASTRONOMY	45	7	52
ASTROPHYSICS	63	6	69
ATOMIC AND MOLECULAR	69		69
ACOUSTICS	21	2	23
FLUIDS	15		15
PLASMA	57	2	59
OPTICS	41	2	43
THERMAL	5		5
ELEMENTARY PARTICLES	112	5	117
NUCLEAR STRUCTURE	67	6	73
SOLID STATE	188	14	202
PHYSICS, GENERAL	157	9	166
PHYSICS, OTHER	78	14	92
CHEMISTRY	1283	255	1538
ANALYTICAL	161	23	184
INORGANIC	157	32	189
ORGANIC	410	74	484
NUCLEAR	13	1	14
PHYSICAL	226	55	281
THEORETICAL	40	7	47
PHARMACEUTICAL	37	15	52
POLYMER	56	5	61
CHEMISTRY, GENERAL	131	29	160
CHEMISTRY, OTHER	52	14	66
EARTH, ENVIRONMENTAL AND MARINE SCI	564	64	628
MINERALOGY, PETROLOGY	43	4	47
GEOCHEMISTRY	45	6	51
STRATIGRAPHY, SEDIMENTATION	35	5	40
PALEONTOLOGY	16	5	21
STRUCTURAL GEOLOGY	19	1	20
GEOPHYSICS (SOLID EARTH)	69	2	71
GEOMORPHOL, GLACIAL GEOLOGY	13	2	15
HYDROLOGY AND WATER RESOURCES	25	3	28
OCEANOGRAPHY	75	10	85
MARINE SCIENCES, OTHER	20	5	25
ATMOSPHERIC PHYSICS AND CHEMISTRY	18	1	19
ATMOSPHERIC DYNAMICS	17	3	20
ATMOSPHERIC SCIENCES, OTHER	47	4	51
ENVIRONMENTAL SCIENCES, GENERAL	15		15
ENVIRONMENTAL SCIENCES, OTHER	19	6	25
APPL GEOL, GEOL ENG, ECON GEOL	27		27
EARTH SCIENCES, GENERAL	44	4	48
EARTH SCIENCES, OTHER	17	3	20
ENGINEERING	2389	80	2479
AERONAUTICAL AND ASTRONAUTICAL	80	1	81
AGRICULTURAL	67	1	68
BIOMEDICAL	65	3	68
CIVIL	233	6	239
CHEMICAL	271	14	285
CERAMIC	22	2	24
COMPUTER	57	5	62
ELECTRICAL	394	11	405
ELECTRONICS	72	1	73
INDUSTRIAL	70	7	77
NUCLEAR	111	1	112
ENGINEERING MECHANICS	88	3	91
ENGINEERING PHYSICS	18		18
MECHANICAL	289	4	293
METALLURGY AND PHYSICAL MET	100	7	107
SYSTEMS DESIGN, SYSTEMS SCIENCE	59	3	62
OPERATIONS RESEARCH	58	5	63
FUEL TECH, PETROLEUM	31		31
SANITARY AND ENVIRONMENTAL	61	5	66
MINING	4		4
MATERIALS SCIENCE	137	5	142
ENGINEERING, GENERAL	37	5	42
ENGINEERING, OTHER	65	1	66
LIFE SCIENCES	3983	1342	5325
BIOLOGICAL SCIENCES	2456	955	3411
BIOCHEMISTRY	484	188	672
BIOPHYSICS	90	18	108
BIOMETRICS, BIOSTATISTICS	29	13	42
ANATOMY	102	45	147
CYTOLOGY	31	13	44
EMBRYOLOGY	11	7	18
IMMUNOLOGY	94	40	124
BOTANY	106	38	144
ECOLOGY	133	36	169
MICROBIOLOGY AND BACTERIOLOGY	247	115	362
PHYSIOLOGY, ANIMAL	271	68	339
PHYSIOLOGY, PLANT	43	9	52
ZOOLOGY	181	46	227
GENETICS	102	55	157
ENTOMOLGGY	135	25	160
MOLECULAR BIOLOGY	122	60	182
NUTRITION AND/OR DIETETICS	28	62	90
BIOL SCIENCES, GENERAL	147	63	210
BIOL SCIENCES, OTHER	110	54	164
AGRICULTURAL SCIENCES	963	109	1072
AGRONOMY	141	10	151
AGRICULTURAL ECONOMICS	148	12	160
ANIMAL HUSBANDRY	23	2	25
FOOD SCIENCE AND TECHNOLOGY	78	24	102
FISH AND WILDLIFE	66	7	73
FORESTRY	74	6	80
HORTICULTURE	65	8	73
SOILS AND SOIL SCIENCE	73	6	79
ANIMAL SCIENCE AND ANIMAL NUTRITION	106	13	119
PHYTOPATHOLOGY	104	14	118
AGRICULTURE, GENERAL	3		3
AGRICULTURE, OTHER	82	7	89
MEDICAL SCIENCES	564	278	842
PUBLIC HEALTH AND EPIDEMIOLOGY	66	57	123
VETERINARY MEDICINE	34	7	41
NURSING	2	74	76
PARASITOLOGY	15	7	22
ENVIRONMENTAL HEALTH	26	13	39
PATHOLOGY	80	28	108
PHARMACOLOGY	197	60	257
PHARMACY	61	9	70
MEDICAL SCIENCES, GENERAL	11	4	15
MEDICAL SCIENCES, OTHER	72	19	91

TABLE 1. CONTINUED

SUBFIELD OF DOCTORATE

NUMBER OF DOCTORATES

SOCIAL SCIENCES (INCL PSYCH)

MEN	WOMEN	TOTAL
4088	2165	6253

ANTHROPOLOGY
COMMUNICATIONS
SOCIOLOGY
ECONOMICS
ECONOMETRICS
STATISTICS
GEOGRAPHY
AREA STUDIES
POLITICAL SCIENCE
PUBLIC ADMINISTRATION
INTERNATIONAL RELATIONS
CRIMINOLOGY
URBAN AND REGIONAL PLANNING
SOCIAL SCIENCES, GENERAL
SOCIAL SCIENCES, OTHER

195	174	369
160	92	252
371	231	602
644	101	745
20	2	22
24	9	33
113	17	130
17	5	22
403	102	505
113	32	145
69	10	79
24	6	30
61	18	79
20	13	33
66	43	109

PSYCHOLOGY

CLINICAL
COUNSELING AND GUIDANCE
DEVELOP AND GERONTOL
EDUCATIONAL
SCHOOL PSYCHOLOGY
EXPERIMENTAL
COMPARATIVE
PHYSIOLOGICAL
INDUSTRIAL AND PERSONNEL
PERSONALITY
PSYCHOMETRICS
SOCIAL
PSYCHOLOGY, GENERAL
PSYCHOLOGY, OTHER

1788	1310	3098
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621	485	1106
159	139	298
85	120	205
75	61	136
93	83	176
209	98	307
6	2	8
84	24	108
50	16	66
25	18	43
11	10	21
112	78	190
120	93	213
138	83	221

HUMANITIES

2335	1528	3863
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ART, HISTORY AND CRITICISM
HISTORY, AMERICAN
HISTORY, EUROPEAN
HISTORY, OTHER
HISTORY AND PHILOSOPHY OF SCIENCE
AMERICAN STUDIES
THEATRE AND THEATRE CRITICISM
MUSIC
SPEECH AS A DRAMATIC ART
ARCHAEOLOGY
RELIGION
PHILOSOPHY
LINGUISTICS
COMPARATIVE LITERATURE

58	86	144
213	69	282
137	57	194
190	57	247
11	10	21
49	32	81
59	35	94
289	111	400
41	22	63
11	14	25
144	26	170
196	58	254
107	75	182
60	47	107

LANGUAGES AND LITERATURE

741	799	1540
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AMERICAN
ENGLISH
GERMAN
RUSSIAN
FRENCH
SPANISH AND PORTUGUESE
ITALIAN
CLASSICAL
OTHER LANGUAGES

117	92	209
374	368	742
46	53	99
10	22	32
45	117	162
55	90	145
3	7	10
36	18	54
55	32	87

HUMANITIES, GENERAL
HUMANITIES, OTHER

5	8	13
24	22	46

PROFESSIONAL FIELDS

970	375	1345
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THEOLOGY
BUSINESS ADMINISTRATION
HOME ECONOMICS
JOURNALISM
SPEECH AND HEARING SCIENCES
LAW, JURISPRUDENCE
SOCIAL WORK
LIBRARY AND ARCHIVAL SCIENCE
PROFESSIONAL FIELDS, OTHER

176	13	189
542	91	633
13	77	90
14	4	18
56	67	123
20	1	21
97	81	178
27	38	65
25	3	28

SUBFIELD OF DOCTORATE

NUMBER OF DOCTORATES

EDUCATION

MEN	WOMEN	TOTAL
4201	3375	7576

FOUNDATIONS: SOCIAL, PHILOS
EDUCATIONAL PSYCHOLOGY
ELEMENTARY EDUCATION, GENERAL
SECONDARY EDUCATION, GENERAL
HIGHER EDUCATION
ADULT EDUC AND EXTENSION EDUC
EDUCATIONAL MEAS AND STATISTICS
CURRICULUM AND INSTRUCTION
EDUCATIONAL ADMIN AND SUPERVISION
GUIDANCE, COUNS, STUDENT PERSONNEL
SPECIAL ED (GIFTED, HANDICAPPED, ETC)
AUDIO-VISUAL MEDIA

126	88	214
233	241	474
51	112	163
103	65	168
412	272	684
144	93	237
56	33	89
401	429	830
1020	509	1529
327	266	593
141	205	346
52	22	74

TEACHING FIELDS

800	740	1540
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AGRICULTURE
ART
BUSINESS
EARLY CHILDHOOD
ENGLISH
FOREIGN LANGUAGE
HOME ECONOMICS
INDUSTRIAL ARTS
MATHEMATICS
MUSIC
NURSING
PHYS ED, HEALTH, AND REC
READING
SCIENCE
SOCIAL SCIENCE
SPEECH
VOCATIONAL
OTHER TEACHING FIELDS

37	2	39
24	21	45
26	26	52
11	61	72
31	43	74
18	18	36
25	27	52
44	30	74
76	34	110
215	150	365
36	125	161
70	26	96
28	22	50
1	9	10
134	95	229
24	8	32

EDUCATION, GENERAL
EDUCATION, OTHER

240	200	440
95	100	195

OTHER AND UNSPECIFIED

17	10	27
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SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 1A
NUMBER OF DOCTORATE RECIPIENTS BY CITIZENSHIP, RACIAL/ETHNIC GROUP, AND SUBFIELD, FY 1980

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP ^{1/}								
			TOTAL	AMER. IND.	ASIAN	BLACK	WHITE	PUERTO RICAN	MEX-ICAN	OTHER HIS-PANIC ^{3/}	OTHER & UNK
TOTAL ALL FIELDS	30582^{2/}	3632	26399	106	1097	1095	22326	69	109	305	1287
PHYSICAL SCIENCES	5114	688	3320	7	238	29	2719	4	7	24	232
MATHEMATICS	745	139	583		43	12	496			5	27
ALGEBRA	78	10	68		1	2	61			1	3
ANALYSIS AND FUNCTIONAL ANALYSIS	91	17	74		2	3	66				3
GEOMETRY	35	4	31		3		28				
LOGIC	24	1	23		1		19				3
NUMBER THEORY	28	6	22		1		20				1
PROBABILITY, MATH STATISTICS	152	39	112		18	2	88			1	3
TOPOLOGY	57	6	51		3		47				1
COMPUTING THEORY AND PRACTICE	13	1	12		1		11				
OPERATIONS RESEARCH	41	12	28		4		22				2
APPLIED	102	18	82		6	1	67			2	6
MATHEMATICS, GENERAL	83	18	67		3		37			1	4
MATHEMATICS, OTHER	41	7	33			2	30				1
COMPUTER SCIENCES	218	43	169		9		143			1	16
PHYSICS AND ASTRONOMY	985	189	788		46	4	622	3	3	6	84
ASTRONOMY	52	3	48		3		40	1	1		3
ASTROPHYSICS	69	8	61		2	1	51	1			6
ATOMIC AND MOLECULAR	69	9	60		3		45				12
ACOUSTICS	23	2	21		3		18				
FLUIDS	15	4	10				8				2
PLASMA	59	8	51		1	2	45			1	2
OPTICS	43	10	33		4		29				
THERMAL	5		5				5				
ELEMENTARY PARTICLES	117	26	91		7		75			2	7
NUCLEAR STRUCTURE	73	16	57		3		49			1	4
SOLID STATE	202	45	156		11		128	1	1	1	14
PHYSICS, GENERAL	166	45	96		5		60			1	30
PHYSICS, OTHER	92	13	79		4	1	69		1		4
CHEMISTRY	1538	237	1264	4	118	12	1036	1	2	10	81
ANALYTICAL	184	18	166	1	12		140			4	9
INORGANIC	189	22	167		13	2	146			1	5
ORGANIC	484	81	401	2	41	3	330	1	2	4	18
NUCLEAR	14	2	12				12				
PHYSICAL	281	38	243		19	2	208			1	13
THEORETICAL	47	7	40				38				2
PHARMACEUTICAL	52	14	36		10		24				2
POLYMER	61	17	44		13		26				5
CHEMISTRY, GENERAL	160	31	96	1	6	3	62				24
CHEMISTRY, OTHER	66	7	59		4	2	50				3
EARTH, ENVIRONMENTAL AND MARINE SCI	628	80	536	3	22	1	482		2	2	24
MINERALOGY, PETROLOGY	47	1	46	2	1		41				2
GEOCHEMISTRY	51	6	44	1	1		42				
STRATIGRAPHY, SEDIMENTATION	40	2	38				36				2
PALEONTOLOGY	21	1	20				20				
STRUCTURAL GEOLOGY	20		19				18				1
GEOPHYSICS ISOLID EARTH	71	16	52		4		46		1		1
GEOLOGICAL, GLACIAL GEOLOGY	15	3	12				12				
HYDROLOGY AND WATER RESOURCES	28	5	22		1		20				1
OCEANOGRAPHY	85	6	77		4		72				1
MARINE SCIENCES, OTHER	25		25		2		21			1	1
ATMOSPHERIC PHYSICS AND CHEMISTRY	19	1	18		2		15				1
ATMOSPHERIC DYNAMICS	20	6	14		1		13				
ATMOSPHERIC SCIENCES, OTHER	51	14	36		2		32			1	1
ENVIRONMENTAL SCIENCES, GENERAL	15	2	13		1		12				
ENVIRONMENTAL SCIENCES, OTHER	25	1	24		2		20				2
APPL GEOL, GEOL ENG, ECON GEOL	27	5	22				21				1
EARTH SCIENCES, GENERAL	48	7	38		1	1	26		1		9
EARTH SCIENCES, OTHER	20	4	16				15				1

^{1/} For more detailed explanation of racial/ethnic groups see item 8 on questionnaire on page 40.

^{2/} Includes 956 individuals who did not report their citizenship at time of doctorate.

^{3/} Earlier versions of the racial/ethnic questionnaire item have grouped all Puerto Ricans, Mexican-Americans, and other Hispanics into one broad "Hispanic" category. All individuals who checked this category on the 7,309 old forms still in circulation during the 1980 survey year have been included in "Other Hispanic."

TABLE 1A. CONTINUED

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP 1/								
			TOTAL	AMER. IND.	ASIAN	BLACK	WHITE	PUERTO RICAN	MEX-ICAN	OTHER HIS-PANIC	OTHER 3/ & UNK
SOCIAL SCIENCES (INCL PSYCH)	6253	526	5498	18	148	222	4151	18	23	65	247
ANTHROPOLOGY	369	17	346	1	9	10	300		1	2	23
COMMUNICATIONS	252	20	228		3	12	207	1	1		4
SOCIOLOGY	602	64	529	3	14	24	451	1	4	11	21
ECONOMICS	745	187	538	2	37	13	443	1	1	11	30
ECONOMETRICS	22	5	17		2		13	1			1
STATISTICS	33	9	24		6		17			1	
GEOGRAPHY	130	20	105	1	5	5	87			1	6
AREA STUDIES	22	2	19				16				1
POLITICAL SCIENCE	505	47	439	1	11	16	379		5	5	22
PUBLIC ADMINISTRATION	145	19	110		1	9	94				6
INTERNATIONAL RELATIONS	79	21	56	1	4	1	46				4
CRIMINOLOGY	30	3	27		1		26				
URBAN AND REGIONAL PLANNING	79	21	58		2	5	44		1	2	4
SOCIAL SCIENCES, GENERAL	33	3	26		1	1	22	1			1
SOCIAL SCIENCES, OTHER	109	17	87		2	6	74			2	3
PSYCHOLOGY	3098	71	2889	9	50	118	2538	13	10	30	121
CLINICAL	1106	12	1037	2	18	43	917	3	8	13	33
COUNSELING AND GUIDANCE	298	2	293	2	4	9	260	2		6	10
DEVELOP AND GERONTOL	205	5	200		3	12	173	1		2	9
EDUCATIONAL	136	1	129	1	4	7	109	1		1	6
SCHOOL PSYCHOLOGY	176	1	174		5		167				2
EXPERIMENTAL	307	10	296		5	2	272	1		4	12
COMPARATIVE	8		8				7				1
PHYSIOLOGICAL	108	2	106		3	5	94			1	3
INDUSTRIAL AND PERSONNEL	66	2	64			4	56	1			3
PERSONALITY	43	1	42		2		35	1			4
PSYCHOMETRICS	21	1	20		2		18				
SOCIAL	190	6	184		4	13	165				2
PSYCHOLOGY, GENERAL	213	7	164	3	3	10	116	1	2	2	27
PSYCHOLOGY, OTHER	221	21	172	1	2	8	149	2		1	9
HUMANITIES	3863	205	3508	9	68	103	3064	12	15	76	161
ART, HISTORY AND CRITICISM	144	6	131		2	1	120		1		7
HISTORY, AMERICAN	282	5	276			13	249		1	2	11
HISTORY, EUROPEAN	194	5	186	1	1	2	172		1	1	8
HISTORY, OTHER	247	19	212		13	12	159	3	1	3	21
HISTORY AND PHILOSOPHY OF SCIENCE	21		21				19				2
AMERICAN STUDIES	81	1	77		1	3	69		1		3
THEATRE AND THEATRE CRITICISM	94	5	87		1	2	81				3
MUSIC	400	18	362	3	7	8	322			2	20
SPEECH AS A DRAMATIC ART	63	2	58			4	49		1		5
ARCHAEOLOGY	25		25				23				2
RELIGION	170	7	153	1	7	3	134			1	7
PHILOSOPHY	254	20	224		3	5	202	2		1	11
LINGUISTICS	182	39	138	1	6	9	109			6	7
COMPARATIVE LITERATURE	107	8	99		6	4	80	1	1	2	5
LANGUAGES AND LITERATURE	1540	68	1405	3	21	33	1231	6	7	58	46
AMERICAN	209	7	202	1		6	191			1	3
ENGLISH	742	29	673	1	9	18	614	1	1	5	24
GERMAN	99	8	85	1	2	1	77			1	3
RUSSIAN	32	1	30			1	29				
FRENCH	162	4	154			5	141	1		4	3
SPANISH AND PORTUGUESE	145	8	133			2	71	4	6	47	3
ITALIAN	10	1	9				9				
CLASSICAL	54	3	49				46				3
OTHER LANGUAGES	87	7	70		10		53				7
HUMANITIES, GENERAL	13	1	11				11				
HUMANITIES, OTHER	46	1	43			4	35		1		3
PROFESSIONAL FIELDS	1395	145	1152	5	44	53	983	5	4	6	52
THEOLOGY	189	6	179		4	3	159				14
BUSINESS ADMINISTRATION	633	95	514	2	26	15	441	1	1	2	26
HOME ECONOMICS	90	2	87			3	80				4
JOURNALISM	18	1	16				15				1
SPEECH AND HEARING SCIENCES	123	2	119	1	2	4	110			1	1
LAW, JURISPRUDENCE	21	8	4			1	3				
SOCIAL WORK	178	9	165	1	6	21	126	2	3	2	4
LIBRARY AND ARCHIVAL SCIENCE	65	8	57	1	4	6	41	2		1	2
PROFESSIONAL FIELDS, OTHER	28	14	11		2		9				

TABLE 1A. CONTINUED

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP 1/								
			TOTAL	AMER. IND.	ASIAN	BLACK	WHITE	PUERTO RICAN	MEX-ICAN	OTHER HIS-PANIC 3/	OTHER & UNK
ENGINEERING	2479	850	1553	3	278	18	1151	3	1	24	45
AERONAUTICAL AND ASTRONAUTICAL	81	34	44		7	1	33			1	2
AGRICULTURAL	68	39	28			1	23			1	3
BIOMEDICAL	68	5	61	1	4	1	47			1	7
CIVIL	239	111	121		21	1	87	1		6	5
CHEMICAL	285	113	164		35	1	116	2		2	8
CERAMIC	24	7	17		4		12				1
COMPUTER	62	25	37		7	2	28				
ELECTRICAL	405	117	271		45	6	197			4	19
ELECTRONICS	73	22	51		7		37			2	5
INDUSTRIAL	77	28	44		6		35			1	2
NUCLEAR	112	36	71		13		55				3
ENGINEERING MECHANICS	91	35	52		10		39			1	2
ENGINEERING PHYSICS	18	2	14		2		11				1
MECHANICAL	293	95	191	1	55	2	128				5
METALLURGY AND PHYSICAL MET	107	33	71	1	17		48		1		4
SYSTEMS DESIGN, SYSTEMS SCIENCE	62	22	40		7		34			1	1
OPERATIONS RESEARCH	63	13	50		7	1	38			2	2
FUEL TECH, PETROLEUM	31	16	15		2	1	10			1	1
SANITARY AND ENVIRONMENTAL	66	9	57		5		51				1
MINING	4	3	1				1				
MATERIALS SCIENCE	142	52	86		15	1	65				5
ENGINEERING, GENERAL	42	9	26		3		18				5
ENGINEERING, OTHER	66	24	41		9		28			1	3
LIFE SCIENCES	5325	710	4507	11	227	68	3908	3	2	33	250
BIOLOGICAL SCIENCES	3411	266	3070	10	151	42	2658	2	2	25	180
BIOCHEMISTRY	672	53	607	2	35	5	517			5	43
BIOPHYSICS	108	8	94		9	2	73				10
BIOMETRICS, BIostatISTICS	42	6	35		5		30				
ANATOMY	147	9	136		3	3	125				5
CYTOLOGY	444	2	42		4		33				4
EMBRYOLOGY	18		18	1	1		14		1		1
IMMUNOLOGY	124	6	117		12	2	93			1	9
BOTANY	144	11	128		5	1	115			1	5
ECOLOGY	169	9	159	1	1	2	144	1		2	8
MICROBIOLOGY AND BACTERIOLOGY	362	21	331	2	23	5	281			4	16
PHYSIOLOGY, ANIMAL	339	16	322	1	9	1	280	1		2	28
PHYSIOLOGY, PLANT	52	4	46		3	2	39				2
ZOOLOGY	227	10	212		1	3	199			1	8
GENETICS	157	22	132		9		118			1	4
ENTOMOLOGY	160	31	126	1	5	2	109		1	2	6
MOLECULAR BIOLOGY	182	18	164		8	5	139			2	11
NUTRITION AND/OR DIETETICS	90	9	79	1	6	3	66			1	2
BIOL SCIENCES, GENERAL	210	18	174	1	6	5	152			1	9
BIOL SCIENCES, OTHER	164	13	148		6	1	132				9
AGRICULTURAL SCIENCES	1072	349	708	1	30	11	627		1	6	32
AGRONOMY	151	64	86		2	2	77				5
AGRICULTURAL ECONOMICS	160	54	103		2	4	89			2	7
ANIMAL HUSBANDRY	25	5	20		1		18				1
FOOD SCIENCE AND TECHNOLOGY	102	38	64	1	10		49			1	3
FISH AND WILDLIFE	73	13	59				58				1
FORESTRY	80	18	61				60				1
HORTICULTURE	73	27	45		2	1	41				1
SOILS AND SOIL SCIENCE	79	32	47		6		37			1	3
ANIMAL SCIENCE AND ANIMAL NUTRITION	119	30	86		3		76			1	6
PHYTOPATHOLOGY	118	37	79			2	73		1		3
AGRICULTURE, GENERAL	3	1	2				2				
AGRICULTURE, OTHER	89	30	56		4	2	48			1	1
MEDICAL SCIENCES	842	95	729		46	15	623	1	4	2	38
PUBLIC HEALTH AND EPIDEMIOLOGY	123	8	114		4	4	98		2		6
VETERINARY MEDICINE	41	19	21		1		17				3
NURSING	76	8	66		1	2	61				2
PARASITOLOGY	22	5	17		1		16				
ENVIRONMENTAL HEALTH	39	6	30		1	2	24			1	2
PATHOLOGY	108	10	95		3	2	84				6
PHARMACOLOGY	257	15	237		15	4	202	1		1	14
PHARMACY	70	16	54		14		38				2
MEDICAL SCIENCES, GENERAL	15	1	13				13				
MEDICAL SCIENCES, OTHER	91	7	82		8	1	70		2		3

TABLE 1A. CONTINUED

SUBFIELD OF DOCTORATE	TOTAL DOCTORATES	NON-U.S. CITIZENS TEMP. VISAS	U.S. CITIZENS AND NON-U.S. WITH PERMANENT VISAS RACIAL/ETHNIC GROUP ^{1/}								
			TOTAL	AMER. IND.	ASIAN	BLACK	WHITE	PUERTO RICAN	MEX-ICAN	OTHER HISPANIC ^{3/}	OTHER E UNK
EDUCATION	1576	507	6832	53	92	602	5676	29	52	77	256
FOUNDATIONS: SOCIAL, PHILOS	214	19	191		9	15	154		2	3	8
EDUCATIONAL PSYCHOLOGY	474	28	436	2	5	17	385	2	5	4	16
ELEMENTARY EDUCATION, GENERAL	163	6	151	5	2	11	124	1		4	4
SECONDARY EDUCATION, GENERAL	168	12	145	1		15	125			1	3
HIGHER EDUCATION	684	39	644	7	3	70	538	2	3	5	16
ADULT EDUC AND EXTENSION EDUC	237	21	214	1	2	14	185	1	1	3	7
EDUCATIONAL MEAS AND STATISTICS	89	8	81		2	1	76				2
CURRICULUM AND INSTRUCTION	830	67	755	2	9	75	613	1	13	15	27
EDUCATIONAL ADMIN AND SUPERVISION	1529	66	1450	22	13	156	1173	8	16	12	50
GUIDANCE, COUNS, STUDENT PERSONNEL	593	16	556	1	9	48	471	2	6	6	13
SPECIAL ED (GIFTED, HANDICAPPED, ETC)	346	9	337	3	10	18	289	1	1	1	14
AUDIO-VISUAL MEDIA	74	16	58		3		53	1			1
TEACHING FIELDS	1540	149	1375	5	13	107	1178	5	3	16	48
AGRICULTURE	39	11	28				4	24			
ART	45	10	35				1	34			
BUSINESS	52	3	49				3	43			
EARLY CHILDHOOD	72	1	71		1	9	58			1	2
ENGLISH	74	5	69		2	8	55			1	3
FOREIGN LANGUAGE	36	10	26		2		17	1	3	3	
HOME ECONOMICS	27		26			1	24				1
INDUSTRIAL ARTS	27	2	25		1	3	21				
MATHEMATICS	74	10	64			7	54			3	
MUSIC	110	3	102	1		8	85				8
NURSING	41	1	40		2	3	35				
PHYS ED, HEALTH, AND REC	365	55	305	3	2	11	276	1			12
READING	161	3	156		1	15	131	1		2	6
SCIENCE	96	15	80		1	8	66			3	2
SOCIAL SCIENCE	50	2	48			3	42				3
SPEECH	10	1	9			1	7				1
VOCATIONAL	229	13	214		1	22	180	2		1	8
OTHER TEACHING FIELDS	32	4	28	1			26			1	
EDUCATION, GENERAL	440	29	274	2	10	35	181		1	2	43
EDUCATION, OTHER	195	22	165	2	2	20	131		1	5	4
OTHER AND UNSPECIFIED	27	1	26		2		18				6

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 2
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY FIELD OF DOCTORATE, FY 1980 ^{1/}

TOTAL ALL DOCTORATES

	FY 1980 TOTAL	PHYSICS AND ASTRONOMY	CHEMISTRY	EARTH, ENVIRONMENTAL AND MARINE SCIENCES	PHYSICAL SCIENCES	MATHEMATICS	COMPUTER SCIENCES	ENGINEERING	EMP. FIELDS	BIOCHEMISTRY	BASIC MEDICAL SCIENCES	OTHER BIOSCIENCES	BIOSCIENCES	MEDICAL SCIENCES	AGRICULTURAL SCIENCES
NUMBER IN FIELD	30982	985	1538	628	3151	745	218	2479	6593	672	1324	1415	3411	842	1072
MALE %	69.7	93.2	83.4	89.8	87.7	87.2	90.4	96.4	91.0	72.0	72.4	71.7	72.0	67.0	89.8
FEMALE %	30.3	6.8	16.6	10.2	12.3	12.8	9.6	3.6	9.0	28.0	27.6	28.3	28.0	33.0	10.2
U.S. CITIZENSHIP %	81.0	72.8	75.7	81.2	75.9	69.8	71.6	50.6	65.6	87.5	87.8	84.4	86.3	79.6	62.1
FOREIGN CITIZENSHIP %	15.9	24.4	21.8	16.9	21.6	27.1	25.7	46.3	31.7	10.7	10.6	12.6	11.5	18.3	36.5
UNKNOWN %	3.1	2.8	2.4	1.9	2.4	3.1	2.8	3.1	2.8	1.8	1.5	3.0	2.2	2.1	1.4
MARRIED %	61.1	49.8	53.8	60.8	54.0	51.0	51.4	62.1	56.6	56.3	55.2	57.2	56.2	64.1	74.3
NOT MARRIED %	34.1	44.5	42.4	36.0	41.8	44.4	43.1	32.7	38.7	39.9	41.3	38.4	39.8	31.8	23.2
UNKNOWN %	4.7	5.7	3.8	3.2	4.3	4.6	5.5	5.2	4.7	3.9	3.5	4.4	3.9	4.0	2.5
MEDIAN AGE AT DOCTORATE	32.2	29.4	28.3	30.8	29.1	29.3	29.5	30.3	25.6	28.6	29.3	30.1	29.5	30.8	31.5
PERCENT WITH BACC IN SAME FIELD AS DOCTORATE	53.8	81.1	85.8	46.5	76.5	81.9	15.6	75.2	74.6	23.7	19.1	69.6	41.0	24.8	53.5
PERCENT WITH MASTERS	80.9	65.6	39.4	74.5	54.6	75.7	78.4	90.4	71.2	32.6	46.9	65.8	51.9	58.2	91.9
MEDIAN TIME LAPSE FROM BACC TO DOCT															
TOTAL TIME YRS	9.3	7.2	6.0	8.1	6.8	7.0	7.4	7.6	7.2	6.3	6.9	7.6	7.1	7.8	8.2
REGISTERED TIME YRS	6.3	6.3	5.2	6.2	5.7	5.9	6.0	5.6	5.7	5.6	5.8	6.3	5.9	5.7	5.6
POSTDOCTORAL STUDY PLANS %	18.4	48.4	41.5	29.8	41.4	13.6	9.6	13.5	26.7	80.4	73.7	46.9	63.9	43.5	16.2
FELLOWSHIP	9.0	15.3	17.9	11.5	15.8	6.6	3.7	3.2	9.6	50.6	44.6	25.9	38.0	22.8	4.1
RESEARCH ASSOC	6.8	31.5	22.0	17.5	24.1	5.1	5.5	8.4	15.4	21.4	18.3	16.3	18.1	11.9	10.8
TRAINEESHIP	1.0	.4	.7	.3	.5	.5	.5	1.3	.8	2.7	3.8	1.6	2.6	1.9	.8
OTHER	1.6	1.2	.9	.5	.9	1.3	.0	.6	.8	5.7	7.1	3.2	5.2	6.9	.5
PLANNED EMPLOYMENT AFTER DOCTORATE %	75.3	44.6	83.9	65.1	53.2	74.7	85.3	79.9	67.3	15.8	22.0	46.5	30.9	51.4	77.9
EDUC. INSTITUTION	45.3	11.9	8.6	23.1	12.5	56.0	39.9	23.0	22.3	5.5	11.7	26.7	16.7	27.9	42.6
INDUSTRY/BUSINESS	12.9	21.7	39.6	23.1	30.7	15.7	37.2	41.8	33.4	7.1	5.0	6.6	6.1	9.5	12.9
GOVERNMENT	8.9	8.2	3.8	15.3	7.5	5.1	5.5	11.9	8.8	1.5	3.2	8.5	5.1	8.1	16.2
NONPROFIT	4.8	.8	.8	1.4	.9	.7	1.8	1.6	1.2	1.0	1.4	1.6	1.4	3.8	1.7
OTHER & UNKNOWN	3.5	1.9	1.2	2.2	1.6	2.3	.9	1.5	1.6	.6	.6	3.0	1.6	2.1	4.5
POSTDOCT STATUS UNKN %	6.3	7.0	4.6	5.1	5.4	6.7	5.0	6.6	6.0	3.9	4.3	6.6	5.2	5.1	5.9
DEFINITE POSTDOCTORAL STUDY SEEKING POSTDOCTORAL STUDY	13.8	38.7	31.9	23.9	32.4	9.4	6.0	9.1	20.2	67.0	62.2	33.7	51.3	36.1	9.9
DEFINITE EMPLOYMENT	4.6	9.7	5.6	5.9	8.9	4.2	3.7	4.4	6.5	13.4	11.5	13.2	12.6	7.4	6.3
SEEKING EMPLOYMENT	56.2	34.1	44.4	53.0	42.9	62.8	67.4	64.5	54.1	10.9	16.4	30.5	21.2	41.6	61.4
UNKNOWN	19.1	10.5	9.5	12.1	10.3	16.9	17.9	15.4	13.2	4.9	5.6	16.0	9.8	9.9	16.5
EMPLOYMENT ACTIVITY AFTER DOCTORATE %															
PRIMARY ACTIVITY															
R & D	25.6	67.9	75.8	53.8	70.4	39.3	64.6	64.7	63.5	68.5	51.2	37.3	44.6	42.0	53.5
TEACHING	40.1	18.5	11.3	22.8	15.9	50.9	25.2	19.8	22.6	17.8	27.6	38.9	33.4	32.3	24.6
ADMINISTRATION	14.4	2.7	1.5	3.0	2.1	.9	2.7	2.0	1.9	2.7	5.5	5.1	5.0	9.7	2.9
PROF. SERVICES	11.4	3.3	1.5	8.7	3.7	4.5	2.7	5.3	4.5	6.8	6.9	9.0	8.2	10.3	4.6
OTHER	3.2	4.5	1.0	8.4	3.7	1.3	1.4	3.1	3.0	2.7	3.7	5.1	4.4	1.4	6.7
ACTIVITY UNKNOWN	5.3	3.3	5.0	3.3	4.1	3.2	3.4	5.1	4.4	1.4	5.1	4.6	4.4	4.3	7.8
SECONDARY ACTIVITY															
R & D	24.9	15.8	7.8	24.3	13.8	41.5	24.5	18.9	20.2	11.0	24.0	34.5	29.9	27.4	21.7
TEACHING	11.2	7.4	3.4	9.9	6.0	19.2	18.4	10.3	10.2	9.6	22.1	11.3	14.4	15.4	21.6
ADMINISTRATION	9.5	6.5	13.9	9.3	10.9	3.0	5.4	9.2	8.9	19.2	9.7	9.7	10.7	16.6	9.7
PROF. SERVICES	7.4	4.2	4.0	6.9	4.7	4.3	2.7	5.8	5.1	5.5	4.6	6.3	5.7	9.7	5.6
OTHER	2.1	.0	.6	2.4	.5	.9	.0	1.1	.9	1.4	.5	1.2	1.0	1.7	1.2
NO SECONDARY ACTIVITY	39.5	62.8	65.4	43.8	59.5	28.0	45.6	49.6	50.3	22.1	34.1	32.4	34.9	24.9	32.4
UNKNOWN	5.3	3.3	5.0	3.3	4.1	3.2	3.4	5.1	4.4	1.4	5.1	4.6	4.4	4.3	7.8
REGION OF EMPLOYMENT AFTER DOCTORATE %															
NEW ENGLAND	6.4	6.8	6.7	2.4	5.7	7.5	9.5	5.9	6.2	6.8	5.1	6.0	5.8	6.6	1.5
MIDDLE ATLANTIC	15.1	21.7	21.2	6.9	17.8	18.8	22.4	15.0	16.9	16.4	13.4	10.9	12.2	15.7	5.2
EAST NO. CENTRAL	13.9	7.1	19.0	6.3	12.9	14.7	10.2	13.5	13.3	9.6	12.9	15.7	14.3	13.4	9.2
WEST NO. CENTRAL	6.8	4.2	6.0	2.7	4.7	5.8	5.4	3.8	4.5	2.7	5.1	5.1	4.8	5.4	11.4
SOUTH ATLANTIC	15.4	15.5	13.3	10.8	13.2	14.1	7.5	10.6	11.9	21.9	22.6	17.1	19.3	16.7	13.1
EAST SO. CENTRAL	4.3	2.7	3.4	3.0	3.1	5.3	.7	3.4	3.4	5.5	4.1	5.1	4.9	2.9	4.3
WEST SO. CENTRAL	4.2	5.1	8.5	21.3	10.8	9.0	4.8	7.9	9.0	5.5	6.5	6.5	6.4	9.7	8.7
MOUNTAIN	4.9	8.6	2.5	15.3	7.2	3.6	6.1	5.8	6.1	5.5	4.1	3.9	4.2	3.1	5.0
PACIFIC & INSULAR	10.9	17.3	11.1	18.0	14.3	10.9	23.8	16.9	15.5	6.8	11.5	11.8	11.2	9.7	8.1
FOREIGN	8.6	7.7	5.3	9.6	7.0	6.8	5.4	11.9	9.1	9.6	11.5	13.9	12.7	12.6	30.4
REGION UNKNOWN	5.6	3.3	2.9	3.6	3.2	3.4	4.1	5.3	4.2	9.6	3.2	3.9	4.3	4.9	4.3

^{1/} Refer to explanatory note on page 22 and the description of doctoral fields inside back cover.

TABLE 2. CONTINUED

TOTAL ALL DOCTORATES

LIFE SCIENCES	PSYCHOLOGY	ECONOMICS	ANTHROPOLOGY & SOCIOLOGY	POLIT. SCI., PUBLIC ADMIN., INTERN'L REL.	OTHER SOCIAL SCIENCES	SOCIAL SCIENCES INCL. PSYCHOL.	TOTAL SCIENCES	HISTORY	ENG. AND AMER. LANG. AND LIT.	FOREIGN LANG. AND LIT.	OTHER HUMANITIES	HUMANITIES	PROFESSIONAL FIELDS	EDUCATION	TOTAL NON-SCIENCES	OTHER OR UNSPECIFIED ^{2/}
5325	3098	767	971	729	688	6253	18171	744	951	589	1579	3863	1345	7576	12784	27
74.8	57.7	86.6	58.3	80.2	70.5	65.4	77.4	76.1	51.6	42.4	66.1	60.4	72.1	55.5	58.7	63.0
25.2	42.3	13.4	41.7	19.8	29.5	34.6	22.6	25.9	48.4	57.6	33.9	39.6	27.9	44.5	41.3	37.0
80.4	91.6	65.4	85.2	78.6	81.0	84.7	76.5	91.0	90.6	81.2	85.9	87.3	81.0	88.7	87.5	
17.6	3.9	31.9	13.3	16.3	16.3	11.6	20.6	6.3	5.2	14.3	10.1	8.8	15.4	8.2	9.1	
2.0	4.5	2.6	1.5	5.1	2.8	3.7	2.9	2.7	4.2	4.6	4.0	3.9	3.6	3.1	3.4	
61.1	53.6	62.5	59.9	59.5	63.5	57.4	58.2	60.6	58.5	57.0	56.7	57.9	67.4	68.7	65.3	
35.2	40.5	33.8	36.3	32.2	32.6	37.2	37.2	34.3	36.2	36.7	37.5	36.4	27.9	26.8	29.8	
3.7	5.9	3.8	3.8	8.2	3.9	5.4	4.6	5.1	5.4	6.3	5.8	5.6	4.7	4.6	4.9	
30.0	30.6	31.0	32.9	32.9	32.8	31.6	30.3	33.3	33.3	34.0	33.2	33.4	34.5	37.0	35.5	
40.9	66.2	61.1	57.2	55.0	27.5	58.6	59.2	68.8	79.5	63.3	53.1	64.2	34.3	39.0	46.1	
61.0	79.8	77.3	88.4	87.4	91.3	83.0	72.2	87.1	88.2	88.3	87.0	87.5	93.2	96.1	93.2	
7.3	7.9	8.3	9.9	10.0	9.7	8.7	7.7	10.7	10.5	10.7	10.6	10.6	11.1	13.1	12.1	
5.8	6.1	6.0	7.3	6.7	6.2	6.4	5.9	8.1	7.8	7.8	7.3	7.7	6.5	6.9	7.1	
51.1	16.7	4.0	12.9	4.7	5.4	11.9	28.7	7.9	4.6	4.9	5.4	5.6	2.8	2.9	3.7	
28.8	9.5	1.2	8.4	2.5	2.5	6.7	14.2	4.4	1.8	1.7	3.0	2.8	1.3	.8	1.5	
15.6	2.8	2.1	3.3	2.1	2.0	2.6	11.1	1.1	.6	1.0	.6	.8	.9	.7	.8	
2.2	2.8	.3	.5	.0	.0	1.5	1.4	.1	.0	.5	.2	.2	.1	.5	.4	
4.5	1.6	.5	.9	.1	.9	1.1	2.0	2.3	2.2	1.7	1.6	1.9	.5	.8	1.1	
43.6	76.0	91.8	83.1	84.6	89.0	81.5	65.2	84.7	87.7	65.9	84.8	85.7	92.3	91.3	89.7	
23.7	30.1	55.8	57.9	52.5	61.5	43.6	30.0	57.8	71.9	68.6	65.0	65.9	65.6	67.8	67.0	
8.0	11.6	10.0	4.4	7.8	10.2	9.7	17.8	6.6	6.4	6.8	6.4	6.5	8.0	5.1	5.8	
7.8	13.8	15.9	8.5	16.0	8.0	12.9	9.9	9.4	1.9	1.9	2.6	3.6	5.4	9.8	7.5	
1.9	14.7	4.4	6.3	4.0	5.4	9.8	4.4	5.2	1.6	1.0	7.1	4.5	11.2	4.7	5.3	
2.3	5.9	5.6	6.0	4.3	3.9	5.5	3.1	5.6	5.9	7.6	3.7	5.2	2.2	3.8	4.1	
5.3	7.3	4.2	4.0	10.7	5.7	6.6	6.0	7.4	7.7	9.2	9.8	8.7	5.0	5.9	6.6	
40.6	12.3	2.7	8.7	3.7	2.0	8.4	22.1	4.3	2.2	1.7	3.2	2.9	1.9	1.6	2.1	
10.5	4.4	1.3	4.2	1.0	3.3	3.5	6.6	3.6	2.4	3.2	2.3	2.7	.8	1.2	1.6	
32.5	54.1	77.3	55.2	62.1	65.7	59.3	49.6	56.3	56.0	47.5	57.8	55.5	78.7	68.5	65.6	
11.1	21.9	14.5	27.9	22.5	23.3	22.1	15.7	28.4	31.7	38.4	27.0	30.2	13.6	22.8	24.1	
47.5	16.8	37.9	29.1	15.0	18.4	21.9	43.3	9.3	3.6	2.5	5.9	5.6	12.3	5.7	6.5	
29.8	21.7	48.2	56.2	53.9	58.8	39.4	30.9	59.9	78.4	80.0	72.4	72.4	58.6	39.0	50.0	
5.1	6.9	2.9	6.2	14.6	6.9	7.1	4.7	11.2	5.8	3.2	4.2	5.8	9.2	36.0	24.9	
7.2	48.1	3.7	2.1	4.6	6.9	24.0	13.1	4.8	3.0	3.2	6.3	4.8	11.7	11.2	9.6	
4.7	1.7	3.7	1.9	5.3	3.5	2.7	3.2	9.1	3.8	2.5	5.9	5.6	3.3	2.2	3.2	
5.7	4.8	8.5	4.7	6.6	5.5	4.9	4.9	5.7	5.4	8.6	5.4	5.9	4.9	6.0	5.8	
25.9	24.0	39.3	41.4	37.5	43.1	33.0	26.5	30.5	30.2	38.6	28.6	30.7	37.1	17.3	23.3	
17.3	14.8	14.5	10.6	7.9	9.3	12.6	12.6	4.8	4.1	1.8	7.5	5.4	12.4	11.1	9.8	
11.5	10.7	6.2	7.3	6.8	8.2	8.7	9.3	8.8	7.7	5.7	7.9	7.7	10.1	10.3	9.6	
6.5	9.2	3.9	4.5	4.0	4.6	6.5	5.9	2.6	2.1	1.1	5.4	3.5	9.2	11.3	9.0	
1.2	3.0	1.3	1.3	1.5	1.3	2.1	1.5	1.9	3.8	3.6	6.1	4.4	1.8	2.4	2.8	
31.9	33.5	31.2	30.2	35.5	27.9	32.2	39.3	45.6	46.7	40.7	39.1	42.5	24.5	41.5	39.6	
5.7	4.8	3.5	4.7	6.6	5.5	4.9	4.9	5.7	5.4	8.6	5.4	5.9	4.9	6.0	5.8	
4.3	7.5	6.6	9.0	6.0	6.9	7.3	6.3	7.6	8.8	11.1	7.3	8.3	5.6	5.9	6.5	
10.2	20.2	14.3	15.3	15.7	12.8	17.1	15.7	16.9	17.3	18.9	14.3	16.1	13.0	13.9	14.4	
11.8	15.7	12.3	11.8	10.6	13.1	13.7	13.2	13.1	12.9	12.9	14.4	13.6	14.7	15.1	14.7	
7.5	6.9	5.2	7.8	6.8	7.7	6.8	6.0	5.0	5.8	8.6	8.6	7.3	6.7	8.0	7.7	
16.2	13.7	21.9	15.5	22.5	15.3	16.5	14.7	19.8	20.1	13.6	14.5	16.8	15.3	16.2	16.2	
4.2	2.9	3.0	4.1	5.5	4.0	3.5	3.6	4.1	5.3	3.2	4.2	4.3	7.2	5.0	5.1	
7.9	7.3	4.6	6.2	5.7	5.3	6.3	7.7	7.2	9.6	5.0	7.3	7.6	12.5	8.4	8.7	
4.3	4.2	3.7	5.6	4.0	4.6	4.6	5.1	2.4	3.0	2.9	4.5	3.5	5.0	5.1	4.7	
9.7	13.1	7.3	10.4	7.7	13.1	11.1	12.6	9.1	5.6	10.4	10.7	9.1	8.4	9.3	9.1	
19.4	2.2	18.0	10.6	9.3	11.1	7.9	10.6	7.4	4.9	5.7	7.1	6.4	8.2	6.1	6.4	
4.4	6.4	3.0	3.7	6.2	4.4	5.2	4.7	7.4	6.8	7.9	6.9	7.1	3.4	7.0	6.6	

2/ Statistics are not presented for this group because too few records contained the specified data.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 2
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY FIELD OF DOCTORATE, FY 1980 1/

DOCTORATES: MEN

	FY 1980 TOTAL	PHYSICS AND ASTRONOMY	CHEMISTRY	EARTH, ENVIRONM. AND MARINE SCIENCES	PHYSICAL SCIENCES	MATHEMATICS	COMPUTER SCIENCES	ENGINEERING	EMP. FIELDS	BIOCHEMISTRY	BASIC MEDICAL SCIENCES	OTHER BIOSCIENCES	BIOSCIENCES	MEDICAL SCIENCES	AGRICULTURAL SCIENCES
TOTAL MALE	21595	918	1283	564	2765	650	197	2389	6001	484	958	1014	2456	564	963
MALE AS A PERCENT OF TOTAL DOCTORATES	69.7	93.2	83.4	89.8	87.7	87.2	90.4	96.4	91.0	72.0	72.4	71.7	72.0	67.0	89.8
U.S. CITIZENSHIP %	77.8	73.2	76.5	80.5	76.2	68.8	69.5	49.8	64.7	88.0	89.0	84.5	86.6	78.5	60.7
FOREIGN CITIZENSHIP %	19.0	23.9	21.1	17.4	21.3	27.7	27.4	47.0	32.4	10.1	10.9	13.1	11.6	19.7	37.7
UNKNOWN %	3.1	2.9	2.4	2.1	2.5	3.5	3.0	3.1	2.9	1.9	1.1	2.4	1.8	1.8	1.6
MARRIED %	64.8	49.5	54.6	60.3	54.0	50.8	53.8	62.9	57.2	57.6	58.4	60.2	59.0	69.9	76.9
NOT MARRIED %	30.2	44.7	41.8	36.2	41.6	44.3	40.6	31.9	38.0	38.4	38.3	35.7	37.3	25.7	20.4
UNKNOWN %	5.0	5.9	3.7	3.5	4.4	4.9	5.6	5.2	4.8	3.9	3.3	4.1	3.8	4.4	2.7
MEDIAN AGE AT DOCTORATE	31.7	29.5	28.4	30.9	29.2	29.2	29.5	30.3	25.7	28.7	29.3	30.1	29.4	30.0	31.7
PERCENT WITH BACC IN SAME FIELD AS DOCTORATE	55.2	81.0	86.1	46.5	76.3	81.1	15.2	76.4	74.9	25.2	19.1	70.4	41.5	17.9	56.1
PERCENT WITH MASTERS	79.1	65.1	38.6	74.3	54.7	74.2	76.1	90.4	71.7	29.9	47.3	65.2	51.1	51.6	92.6
MEDIAN TIME LAPSE FROM BACC TO DOCT															
TOTAL TIME YRS	8.8	7.2	6.1	8.1	6.9	6.9	7.3	7.7	7.2	6.3	6.9	7.4	7.0	7.1	8.3
REGISTERED TIME YRS	6.2	6.2	5.2	6.2	5.8	5.8	6.0	5.6	5.7	5.6	5.7	6.3	5.9	5.6	5.6
POSTDOCTORAL STUDY PLANS %	19.7	48.3	40.8	29.3	40.9	14.5	10.2	13.8	26.2	81.0	73.1	46.1	63.5	48.4	15.5
FELLOWSHIP	9.2	14.8	17.7	11.7	15.5	7.1	4.1	3.2	9.3	50.2	41.5	24.3	36.1	24.5	4.0
RESEARCH ASSOC	8.0	31.9	21.7	17.0	24.1	5.7	5.6	8.6	15.3	22.5	19.2	17.0	18.9	13.5	10.0
TRAINEESHIP	1.0	.4	.6	.2	.5	.5	.5	1.3	.8	2.5	4.2	1.7	2.8	2.1	.9
OTHER	1.6	1.1	.9	.4	.8	1.2	.0	.7	.8	5.8	8.1	3.2	5.6	8.3	.5
PLANNED EMPLOYMENT															
AFTER DOCTORATE %	74.1	44.7	54.7	66.0	53.7	78.2	84.3	79.7	67.7	15.1	22.5	47.9	31.6	46.6	78.5
EDUC. INSTITUTION	41.9	12.0	7.6	22.5	12.1	54.6	38.6	22.9	21.8	4.8	11.5	26.9	16.5	20.7	43.7
INDUSTRY/BUSINESS	14.8	21.5	41.0	23.8	31.0	15.4	38.1	41.8	33.8	7.2	5.8	7.0	6.6	10.1	12.6
GOVERNMENT	10.0	8.4	4.1	16.0	8.0	5.5	4.6	12.0	9.2	1.7	3.5	10.3	5.9	9.6	16.5
NONPROFIT	4.7	.9	.9	1.6	1.0	.8	2.0	1.5	1.2	1.0	1.6	1.5	1.4	4.1	1.8
OTHER & UNKNOWN	2.6	2.0	1.2	2.1	1.6	1.8	1.0	1.5	1.6	.4	1.1	2.3	1.1	2.1	3.9
POSTDOCT STATUS UNKN %	6.2	7.1	4.4	4.8	5.4	7.4	5.6	6.6	6.1	3.9	4.4	6.0	5.0	5.0	6.0
DEFINITE POSTDOCTORAL STUDY	14.9	38.9	31.5	23.6	32.3	10.3	6.1	9.2	19.9	67.4	62.1	33.1	51.2	40.6	9.1
SEEKING POSTDOCTORAL STUDY	4.8	9.4	5.4	5.7	8.6	4.2	4.1	4.6	6.4	13.6	11.0	12.9	12.3	7.8	6.3
DEFINITE EMPLOYMENT	57.0	33.9	45.8	54.1	43.5	62.5	66.5	64.4	54.6	10.5	17.1	32.7	22.3	38.7	62.9
SEEKING EMPLOYMENT	17.1	10.8	8.9	11.9	10.1	15.7	17.8	15.3	13.0	4.5	5.4	15.2	9.3	8.0	15.6
EMPLOYMENT ACTIVITY AFTER DOCTORATE %															
PRIMARY ACTIVITY															
R & D	30.4	68.5	81.1	54.8	71.2	42.6	67.9	64.5	64.4	78.4	53.7	40.4	47.9	46.8	53.5
TEACHING	36.7	18.0	10.0	22.0	15.1	48.0	22.9	19.7	21.7	11.8	25.6	35.5	30.3	23.9	23.8
ADMINISTRATION	13.9	2.9	1.5	3.0	2.2	.7	1.5	2.0	1.9	2.0	3.7	5.4	4.6	8.7	3.0
PROF. SERVICES	10.2	3.2	1.5	8.9	3.8	4.2	3.1	5.5	4.6	3.9	7.9	9.3	8.4	13.3	4.8
OTHER	3.3	4.2	.7	7.9	3.4	1.0	1.5	3.1	2.9	2.0	4.9	4.2	4.2	1.4	6.9
ACTIVITY UNKNOWN	5.5	3.2	5.1	3.6	4.2	3.4	3.1	5.2	4.5	2.0	4.3	5.1	4.6	6.0	8.1
SECONDARY ACTIVITY															
R & D	23.6	15.4	7.5	23.0	13.5	39.4	22.1	18.9	19.5	7.8	23.2	31.9	27.1	24.8	21.9
TEACHING	11.6	7.7	3.2	9.8	6.1	20.7	20.6	10.3	10.5	11.8	22.6	11.1	14.6	15.6	22.3
ADMINISTRATION	9.8	6.8	15.1	10.2	11.7	3.0	6.1	9.4	9.3	21.6	12.2	9.9	11.7	17.0	9.4
PROF. SERVICES	7.1	4.2	4.1	7.2	4.9	4.7	3.1	5.7	5.2	5.9	4.9	6.6	6.0	9.6	5.6
OTHER	1.9	.0	.7	2.3	.9	1.0	.0	1.0	.9	2.0	.6	1.2	1.1	.9	1.0
NO SECONDARY ACTIVITY	40.5	62.7	64.3	43.9	58.7	27.8	45.0	49.5	50.0	49.0	32.3	34.0	34.9	26.1	31.7
UNKNOWN	5.5	3.2	5.1	3.6	4.2	3.4	3.1	5.2	4.5	2.0	4.3	5.1	4.6	6.0	8.1
REGION OF EMPLOYMENT AFTER DOCTORATE %															
NEW ENGLAND	6.2	6.8	7.1	2.3	5.8	7.1	9.9	5.9	6.2	7.8	6.1	6.0	6.2	5.0	1.3
MIDDLE ATLANTIC	14.3	20.9	21.1	7.5	17.6	17.5	21.4	15.0	16.5	13.7	14.6	9.0	11.2	14.2	4.3
EAST NO CENTRAL	13.7	7.1	19.9	5.9	13.0	15.0	9.2	13.5	13.3	9.8	12.2	15.7	14.1	14.7	8.1
WEST NO CENTRAL	6.8	4.5	5.4	2.6	4.5	6.4	5.3	3.8	4.4	3.9	3.7	4.8	4.4	6.9	10.7
SOUTH ATLANTIC	15.1	16.4	12.2	9.8	12.7	13.1	7.6	10.7	11.6	19.6	23.2	17.8	19.6	17.9	13.4
EAST SO CENTRAL	4.3	2.6	3.4	2.6	3.0	4.9	.8	3.3	3.3	5.9	3.7	5.4	4.9	2.8	4.5
WEST SO CENTRAL	8.1	5.5	8.5	21.0	10.9	9.6	5.3	7.9	9.1	5.9	6.7	5.7	6.0	9.6	8.4
MOUNTAIN	5.0	8.0	2.4	16.4	7.4	3.9	5.3	5.9	6.2	7.8	4.9	4.2	4.8	5.0	5.4
PACIFIC & INSULAR	11.2	17.0	10.9	18.4	14.4	11.6	24.4	16.9	15.6	7.8	9.8	11.7	10.8	7.3	8.1
FOREIGN	10.2	7.7	5.8	9.3	7.3	7.1	6.1	12.0	9.5	7.8	12.8	15.4	13.9	12.8	31.5
REGION UNKNOWN	5.0	3.5	3.2	3.6	3.4	3.7	4.6	5.3	4.4	9.8	2.4	4.2	4.2	3.7	4.3

1/ Refer to explanatory note on page 22 and the description of doctoral fields inside back cover.

TABLE 2. CONTINUED

DOCTORATES: MEN

LIFE SCIENCES	PSYCHOLOGY	ECONOMICS	ANTHROPOLOGY & SOCIOLOGY	POLIT. SCI., PUBLIC ADMIN., INTERN'L REL.	OTHER SOCIAL SCIENCES	SOCIAL SCIENCES INCL. PSYCHOL.	TOTAL SCIENCES	HISTORY	ENG. AND AMER. LANG. AND LIT.	FOREIGN LANG. AND LIT.	OTHER HUMANITIES	HUMANITIES	PROFESSIONAL FIELDS	EDUCATION	TOTAL NON-SCIENCES	OTHER OR UNSPECIFIED ^{2/}
3983	1788	664	566	585	485	4088	14072	551	491	250	1043	2335	970	4201	7506	17
74.8	57.7	86.6	58.3	80.2	70.5	65.4	77.4	74.1	51.6	42.4	66.1	60.4	72.1	55.5	58.7	63.0
79.2	90.9	64.6	83.6	78.1	79.2	82.4	73.9	90.2	89.8	80.0	83.9	86.2	77.0	86.4	85.1	
19.1	4.4	32.7	14.5	17.3	17.7	13.8	23.2	6.7	6.1	15.6	11.6	9.7	18.5	10.4	11.2	
1.7	4.8	2.7	1.9	4.6	3.1	3.8	2.8	3.1	4.1	4.4	4.5	4.1	4.5	3.2	3.7	
64.9	57.8	63.7	68.0	61.7	69.3	62.1	60.8	62.1	61.3	61.2	60.4	61.1	73.9	78.0	72.2	
31.5	35.4	32.4	26.9	30.1	26.2	31.9	34.4	31.9	32.6	32.4	33.4	32.8	20.5	17.1	22.4	
3.6	6.8	3.9	5.1	8.2	4.5	6.0	4.8	6.0	6.1	6.4	6.2	6.2	5.6	4.9	5.4	
30.0	30.4	31.1	32.8	33.0	32.8	31.5	30.3	33.1	32.4	33.4	33.1	33.0	34.3	36.7	35.1	
41.7	68.7	61.1	58.1	56.1	31.1	59.8	61.1	69.3	79.0	55.6	54.2	63.1	34.9	35.7	44.1	
61.2	79.9	76.2	87.8	87.9	92.4	83.0	72.0	87.5	86.4	86.0	85.6	86.3	92.6	96.0	92.5	
7.3	7.7	8.3	9.8	9.9	9.7	8.5	7.6	10.6	9.8	10.0	10.3	10.3	11.0	12.9	11.7	
5.8	6.0	6.0	7.3	6.7	6.2	6.3	5.9	8.0	7.3	7.4	7.0	7.4	6.7	7.0	7.1	
49.7	16.4	3.9	11.8	5.1	4.9	10.8	28.4	8.2	4.7	4.4	4.6	5.4	2.8	2.5	3.4	
26.7	9.6	.9	7.6	2.7	1.9	6.0	13.3	4.9	1.4	1.2	2.5	2.7	1.3	.7	1.4	
16.0	2.7	2.1	3.2	2.2	2.3	2.5	11.8	1.1	1.0	.4	.5	.7	.8	.7	.7	
2.3	2.6	.3	.4	.0	.0	1.2	1.3	.2	.0	1.2	.2	.3	.0	.5	.3	
4.8	1.5	.6	.7	.2	.8	1.0	2.0	2.0	2.2	1.6	1.4	1.8	.6	.6	1.0	
45.0	76.2	91.9	84.1	84.6	89.3	82.6	65.6	84.4	87.6	87.2	85.9	86.0	91.5	91.9	90.0	
23.7	28.3	56.3	59.0	51.3	63.1	44.5	29.0	57.0	72.5	70.0	64.2	64.9	63.8	67.5	66.2	
8.5	12.0	9.3	4.8	9.1	8.7	9.8	19.7	6.4	6.7	6.4	6.7	6.6	8.2	4.7	5.7	
9.0	16.4	16.6	9.7	17.3	8.7	14.7	10.7	11.6	2.2	1.6	3.2	4.8	5.3	11.5	8.6	
1.9	14.7	4.7	5.8	3.6	5.6	9.1	3.7	5.4	1.2	2.4	8.8	5.7	12.7	5.7	6.6	
1.9	4.8	5.0	4.8	3.4	3.3	4.4	2.5	4.0	4.9	6.8	3.0	4.0	1.5	2.5	2.9	
5.2	7.4	4.2	4.1	10.3	5.8	6.6	6.0	7.4	7.7	8.4	9.5	8.5	5.7	5.7	6.6	
39.5	12.4	2.6	7.8	3.9	1.9	7.7	21.9	4.4	2.2	1.2	3.1	3.0	1.8	1.4	1.9	
10.2	4.1	1.4	4.1	1.2	3.1	3.1	6.5	3.8	2.4	3.2	1.5	2.4	1.0	1.1	1.5	
34.4	55.9	78.0	57.2	62.4	69.3	62.2	51.1	57.2	57.0	47.6	59.5	57.2	80.0	71.2	68.0	
10.6	20.2	13.9	26.9	22.2	20.0	20.4	14.5	27.2	30.5	39.6	26.4	28.9	11.5	20.6	22.0	
50.2	18.7	38.0	29.6	14.5	17.6	23.3	47.1	8.9	3.6	3.4	5.6	5.8	12.9	5.6	6.8	
26.4	19.4	48.5	56.5	52.1	58.9	40.0	29.0	59.0	78.9	81.5	70.9	70.7	57.7	34.6	47.6	
4.5	6.7	2.9	6.5	15.9	7.7	7.4	4.3	11.4	4.6	2.5	4.5	6.0	9.3	41.5	27.3	
7.6	47.5	3.7	1.9	5.5	4.5	21.0	11.0	6.3	2.9	1.7	7.4	5.7	11.6	10.1	9.2	
5.0	1.8	3.1	1.9	5.5	4.5	2.9	3.3	9.2	4.3	1.7	6.4	6.2	3.9	2.0	3.4	
6.3	5.9	3.9	3.7	6.6	6.8	5.4	5.2	5.1	5.7	9.2	5.2	5.6	4.6	6.2	5.8	
24.4	22.7	39.8	39.8	36.4	41.1	32.8	25.1	29.2	29.6	43.7	25.6	28.9	33.9	14.9	21.4	
18.2	14.5	14.5	11.7	7.7	8.6	12.4	12.6	4.1	2.5	2.5	8.5	5.7	13.7	11.2	10.1	
11.5	12.9	6.6	8.3	6.6	8.0	9.5	9.8	9.8	8.6	8.4	8.5	8.8	10.8	10.1	9.9	
6.4	10.0	3.7	4.6	3.8	5.1	6.5	5.9	2.5	1.8	.0	5.2	3.4	9.7	11.1	8.9	
1.0	2.5	1.5	1.9	1.4	.9	1.8	1.3	2.5	5.0	2.5	6.1	4.7	1.9	2.3	2.9	
32.1	31.5	30.1	29.9	37.5	29.5	31.6	40.1	46.7	46.8	33.6	40.9	42.8	25.4	44.2	41.0	
6.3	5.9	3.9	3.7	6.6	6.8	5.4	5.2	5.1	5.7	9.2	5.2	5.6	4.6	6.2	5.8	
3.9	8.3	6.2	9.3	5.8	6.8	7.4	6.2	7.0	8.9	10.9	6.6	7.6	5.2	6.0	6.3	
8.6	17.6	14.7	14.2	14.2	10.4	15.1	14.5	14.6	18.2	16.0	13.7	13.1	12.2	14.1	14.1	
11.5	16.3	12.4	10.5	10.1	14.0	13.6	13.1	12.1	14.6	15.1	13.7	13.6	14.3	15.2	14.6	
7.6	7.2	5.4	8.0	6.9	8.0	7.0	5.9	6.0	3.6	8.4	9.8	7.5	7.1	8.6	8.1	
16.6	13.6	21.0	14.8	22.5	16.7	16.9	14.4	22.2	19.6	11.8	13.7	16.8	15.5	15.7	16.0	
4.4	3.1	3.5	4.3	6.3	4.5	4.0	3.7	4.1	4.6	4.2	4.6	4.6	7.3	4.6	5.0	
7.7	7.3	4.4	6.5	5.8	6.0	6.2	7.8	7.6	10.7	5.0	8.7	8.5	12.4	7.8	8.7	
5.1	4.5	3.7	4.6	4.4	4.8	4.4	5.3	2.2	2.5	4.2	4.2	3.4	4.6	5.2	4.6	
9.0	13.2	7.1	11.1	7.7	14.0	11.0	12.7	7.9	6.4	11.8	10.0	8.9	9.3	8.9	9.0	
21.5	2.7	18.7	13.3	10.1	11.3	9.5	11.4	8.3	5.7	6.7	8.5	7.7	9.3	7.9	8.1	
4.2	6.2	2.9	3.7	6.3	3.6	4.9	4.5	7.9	5.0	5.9	6.3	6.4	2.8	6.0	5.6	

^{2/} Statistics are not presented because too few records contained the specified data.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 2
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY FIELD OF DOCTORATE, FY 1980 1/

DOCTORATES: WOMEN

	FY 1980 TOTAL	PHYSICS AND ASTRONOMY	CHEMISTRY	EARTH, ENVIRON- MENTAL AND MARINE SCIENCES	PHYSICAL SCIENCES	MATHEMATICS	COMPUTER SCIENCES	ENGINEERING	EMP. FIELDS	BIOCHEMISTRY	BASIC MEDICAL SCIENCES	OTHER BIOSCIENCES	BIOSCIENCES	MEDICAL SCIENCES	AGRICULTURAL SCIENCES
TOTAL FEMALE FEMALE AS A PERCENT OF TOTAL DOCTORATES	9387 30.3	67 6.8	255 16.6	64 10.2	386 12.3	95 12.8	21 9.6	90 3.6	592 9.0	188 28.0	366 27.6	401 28.3	955 28.0	278 33.0	179 10.2
U.S. CITIZENSHIP %	88.4	67.2	72.2	87.5	73.8	76.8	90.5	71.1	74.5	86.2	87.4	84.0	85.8	81.7	74.3
FOREIGN CITIZENSHIP %	8.6	31.3	25.5	12.5	24.4	23.2	9.5	27.8	24.2	12.2	10.1	11.2	11.0	15.5	25.7
UNKNOWN %	3.0	1.5	2.4	.0	1.8	.0	.0	1.1	1.4	1.6	2.5	4.7	3.2	2.9	.0
MARRIED %	52.8	55.2	50.2	65.6	53.6	52.6	28.6	40.0	50.5	52.7	47.0	49.6	49.2	52.5	50.5
NOT MARRIED %	43.1	41.8	45.5	34.4	43.0	45.3	66.7	53.3	45.8	43.6	49.2	45.4	46.5	44.2	48.6
UNKNOWN %	4.1	3.0	4.3	.0	3.4	2.1	4.8	6.7	3.7	3.7	3.8	5.0	4.3	3.2	.9
MEDIAN AGE AT DOCTORATE	33.5	29.1	27.9	30.5	28.5	30.2	30.0	28.9	28.8	28.4	29.3	30.3	29.5	32.8	29.9
PERCENT WITH BACC IN SAME FIELD AS DOCTORATE	50.7	82.1	84.3	46.9	77.7	87.4	19.0	42.2	71.8	19.7	19.1	67.6	39.6	38.8	31.2
PERCENT WITH MASTERS	84.9	71.6	43.5	76.6	53.9	86.3	100.0	88.9	66.0	42.0	45.9	67.3	54.1	71.6	85.3
MEDIAN TIME LAPSE FROM BACC TO DOCT TOTAL TIME YRS	10.5	7.1	5.7	8.0	6.3	8.2	8.3	6.6	6.7	6.3	7.0	8.0	7.2	9.9	7.2
REGISTERED TIME YRS	6.6	6.4	5.2	6.4	5.5	6.5	6.5	5.8	5.8	5.7	5.9	6.3	6.0	5.9	5.8
POSTDOCTORAL STUDY PLANS %	15.4	50.7	45.1	34.4	44.3	7.4	4.8	6.7	31.3	78.7	75.4	49.1	65.0	33.5	22.9
FELLOWSHIP	8.5	22.4	19.2	9.4	18.1	3.2	.0	3.3	12.8	51.6	52.5	30.2	42.9	19.4	4.6
RESEARCH ASSOC	4.1	25.4	23.5	21.9	23.6	1.1	4.8	3.3	16.2	18.6	15.8	14.5	15.8	8.6	18.3
TRAINEESHIP	1.0	.0	1.2	1.6	1.0	1.1	.0	.0	.8	3.2	2.7	1.2	2.2	1.4	.0
OTHER	1.7	3.0	1.2	1.6	1.6	2.1	.0	.0	1.4	5.3	4.4	3.2	4.1	4.0	.0
PLANNED EMPLOYMENT AFTER DOCTORATE %	78.2	43.3	49.8	57.8	50.0	90.5	95.2	85.6	63.5	17.6	20.5	42.9	29.3	61.2	72.5
EDUC INSTITUTION	53.1	10.4	13.7	28.1	15.5	65.3	52.4	27.8	26.7	7.4	12.3	26.2	17.2	42.4	33.0
INDUSTRY/BUSINESS	8.3	25.4	32.5	17.2	28.8	17.9	28.6	42.2	29.1	6.9	2.7	5.7	4.8	8.3	15.6
GOVERNMENT	6.3	6.0	2.0	9.4	3.9	2.1	14.3	11.1	5.1	1.1	2.5	4.0	2.8	5.0	13.8
NONPROFIT	4.8	.0	.4	.0	.3	.0	.0	2.2	.5	1.1	1.1	2.0	1.5	3.2	.9
OTHER & UNKNOWN	5.6	1.5	1.2	3.1	1.6	5.3	.0	2.2	2.2	1.1	1.9	5.0	3.0	2.2	9.2
POSTDOCT STATUS UNKN %	6.4	6.0	5.1	7.8	5.7	2.1	.0	7.8	5.2	3.7	4.1	8.0	5.7	5.4	4.6
DEFINITE POSTDOCTORAL STUDY SEEKING POSTDOCTORAL STUDY	11.3	35.8	34.1	26.6	33.2	3.2	4.8	5.6	23.1	66.0	62.6	35.2	51.7	27.0	16.5
DEFINITE EMPLOYMENT	4.1	14.9	11.0	7.8	11.1	4.2	.0	1.1	8.1	12.8	12.8	14.0	13.3	6.5	6.4
SEEKING EMPLOYMENT	54.4	37.3	37.3	43.8	38.3	65.3	76.2	67.8	48.5	11.7	14.5	24.9	18.3	47.5	47.7
SEEKING EMPLOYMENT	23.9	6.0	12.5	14.1	11.7	25.3	19.0	17.8	15.0	5.9	6.0	18.0	11.0	13.7	24.8
EMPLOYMENT ACTIVITY AFTER DOCTORATE %															
PRIMARY ACTIVITY															
R & D	13.9	60.0	71.6	42.9	64.2	17.7	37.5	68.9	53.7	45.5	43.4	27.0	34.3	34.1	53.8
TEACHING	48.3	24.0	18.9	32.1	22.3	69.4	43.8	23.0	33.8	31.8	34.0	50.0	42.9	46.2	34.6
ADMINISTRATION	15.8	.0	1.1	3.6	1.4	1.6	12.5	1.6	2.1	4.5	11.3	4.0	6.3	11.6	1.9
PROF. SERVICES	14.2	4.0	1.1	7.1	2.7	6.5	.0	1.6	3.1	13.6	3.8	8.0	7.4	5.3	1.9
OTHER	2.9	8.0	3.2	14.3	6.1	3.2	.0	1.6	4.2	4.5	.0	8.0	5.1	1.5	3.8
ACTIVITY UNKNOWN	5.0	4.0	4.2	.0	3.4	1.6	6.3	3.3	3.1	.0	7.5	3.0	4.0	1.5	3.8
SECONDARY ACTIVITY															
R & D	28.2	20.0	9.5	39.3	16.9	54.8	43.8	19.7	27.2	18.2	26.4	43.0	34.9	31.8	19.2
TEACHING	10.4	4.0	4.2	10.7	5.4	9.7	.0	9.8	7.0	4.5	20.8	12.0	13.7	15.2	13.5
ADMINISTRATION	8.6	4.0	6.3	.0	4.7	3.2	.0	3.3	3.8	13.6	1.9	9.0	7.4	15.9	13.5
PROF. SERVICES	8.2	4.0	3.2	3.6	3.4	1.6	.0	9.8	4.2	4.5	3.8	5.0	4.6	9.8	5.8
OTHER	2.6	.0	.0	3.6	.7	.0	.0	1.6	.7	.0	.0	1.0	.6	3.0	3.8
NO SECONDARY ACTIVITY	37.1	64.0	72.6	42.9	65.5	29.0	50.0	52.5	54.0	59.1	39.6	27.0	34.9	22.7	40.4
UNKNOWN	5.0	4.0	4.2	.0	3.4	1.6	6.3	3.3	3.1	.0	7.5	3.0	4.0	1.5	3.8
REGION OF EMPLOYMENT AFTER DOCTORATE %															
NEW ENGLAND	6.8	8.0	4.2	3.6	4.7	9.7	6.3	6.6	6.3	4.5	1.9	6.0	4.6	9.1	3.8
MIDDLE ATLANTIC	16.8	32.0	22.1	.0	19.6	27.4	31.3	14.8	20.9	22.7	9.4	17.0	15.4	18.2	15.4
EAST NO CENTRAL	14.3	8.0	13.7	10.7	12.2	12.9	18.8	14.8	13.2	9.1	15.1	16.0	14.9	11.4	9.6
WEST NO CENTRAL	6.8	.0	9.5	3.6	6.8	1.6	6.3	3.3	4.9	.0	9.4	6.0	6.3	3.0	19.2
SOUTH ATLANTIC	16.2	4.0	20.0	21.4	17.6	21.0	6.3	9.8	16.0	27.3	20.8	15.0	18.3	12.9	9.6
EAST SO CENTRAL	4.5	4.0	3.2	7.1	4.1	8.1	.0	4.9	4.9	4.5	5.7	4.0	4.6	3.0	1.5
WEST SO CENTRAL	8.2	.0	8.4	25.0	10.1	4.8	.0	9.8	8.4	4.5	5.7	9.0	7.4	9.8	11.5
MOUNTAIN	4.6	16.0	3.2	3.6	5.4	1.6	12.5	4.9	4.9	.0	1.9	3.0	2.3	.0	.0
PACIFIC & INSULAR	10.3	20.0	12.6	14.3	14.2	6.5	18.8	18.0	13.6	4.5	17.0	12.0	12.6	13.6	7.7
FOREIGN	4.6	8.0	2.1	7.1	4.1	4.8	.0	8.2	4.9	13.6	7.5	9.0	9.1	12.1	17.3
REGION UNKNOWN	7.0	.0	1.1	3.6	1.4	1.6	.0	4.9	2.1	9.1	5.7	3.0	4.6	6.8	3.8

1/ Refer to explanatory note on page 22 and the description of doctoral fields inside back cover.

TABLE 2. CONTINUED

DOCTORATES: WOMEN

LIFE SCIENCES	PSYCHOLOGY	ECONOMICS	ANTHROPOLOGY & SOCIOLOGY	POLIT. SCI., PUBLIC ADMIN., INTERN'L REL.	OTHER SOCIAL SCIENCES	SOCIAL SCIENCES INCL. PSYCHOL.	TOTAL SCIENCES	HISTORY	ENG. AND AMER. LANG. AND LIT.	FOREIGN LANG. AND LIT.	OTHER HUMANITIES	HUMANITIES	PROFESSIONAL FIELDS	EDUCATION	TOTAL NON-SCIENCES	OTHER OR UNSPECIFIED ^{2/}
1342	1310	103	405	144	203	2165	4096	193	460	339	536	1528	375	3375	5278	10
25.2	42.3	13.4	41.7	19.8	29.5	34.6	22.6	25.9	48.4	57.6	33.9	39.6	27.9	44.5	41.3	37.0
84.0	92.7	70.9	87.4	80.6	85.2	89.1	85.3	93.3	91.5	82.0	89.9	89.1	91.5	91.5	90.8	
13.1	3.3	27.2	11.6	12.5	12.8	7.5	11.7	5.2	4.1	13.3	7.1	7.3	7.5	5.5	6.1	
2.9	4.0	1.9	1.0	6.9	2.0	3.4	2.9	1.6	4.3	4.7	3.0	3.6	1.1	3.0	3.1	
50.0	47.8	54.4	48.6	50.7	49.8	48.6	49.4	56.5	55.4	54.0	49.4	53.1	50.7	57.0	55.5	
46.2	47.6	42.7	49.4	41.0	47.8	47.3	46.7	40.9	40.0	39.8	45.5	42.0	46.9	38.8	40.3	
3.8	4.7	2.9	2.0	8.3	2.5	4.1	4.0	2.6	4.6	6.2	5.0	4.8	2.4	4.1	4.2	
30.0	30.9	30.4	33.1	32.8	32.5	31.7	30.6	34.3	34.4	34.5	33.4	34.0	35.4	37.5	36.1	
38.7	62.8	61.2	55.8	50.7	18.7	56.5	52.9	67.4	80.0	69.0	51.1	65.8	32.8	43.2	49.0	
60.3	79.6	84.5	89.1	95.4	88.7	82.9	73.0	86.0	90.2	90.0	89.6	89.4	94.7	96.3	94.2	
7.6	8.3	8.2	9.9	10.4	9.9	8.9	8.1	10.9	11.6	11.5	11.0	11.2	12.1	13.5	12.7	
6.0	6.3	6.2	7.3	6.9	6.1	6.5	6.2	8.3	8.4	8.0	7.8	8.1	6.2	6.7	7.1	
55.1	17.0	4.9	14.3	2.8	6.4	14.0	29.9	7.3	4.6	5.3	7.1	6.0	2.7	3.3	4.1	
34.9	9.3	2.9	9.6	1.4	3.9	8.0	17.5	3.1	2.2	2.1	4.1	2.9	1.1	1.0	1.6	
14.5	2.9	1.9	2.7	1.4	1.5	2.6	8.5	1.0	.2	1.5	.7	.8	1.1	.7	.9	
1.9	3.1	.0	.7	.0	.0	2.0	1.8	.0	.0	.0	.2	.1	.3	.6	.4	
3.7	1.7	.0	1.2	.0	1.0	1.3	2.1	3.1	2.2	1.8	2.1	2.2	.3	1.0	1.3	
39.4	75.8	91.3	81.7	84.7	88.2	79.4	64.0	85.5	87.8	85.0	82.6	85.1	94.1	90.5	89.2	
23.7	32.5	52.4	56.3	57.6	57.6	41.9	33.8	60.1	71.3	67.6	66.6	67.4	70.1	68.3	68.2	
6.4	11.0	14.6	4.0	2.8	13.8	9.6	11.3	7.3	6.1	7.1	5.8	6.3	7.2	5.7	6.0	
4.2	10.2	11.7	6.9	11.1	6.4	9.3	7.0	3.1	1.5	2.1	1.5	1.8	5.6	7.6	5.8	
1.8	14.7	2.9	6.9	5.6	4.9	11.1	6.5	4.7	2.0	.0	3.7	2.5	7.2	3.6	3.5	
3.4	7.5	9.7	7.7	7.6	5.4	7.4	5.3	10.4	7.0	8.3	5.0	7.0	4.0	5.4	5.8	
5.5	7.2	3.9	4.0	12.5	5.4	6.6	6.1	7.3	7.6	9.7	10.3	9.0	3.2	6.1	6.7	
43.7	12.2	3.9	9.9	2.8	2.5	9.8	22.9	4.1	2.2	2.1	3.4	2.8	2.4	2.0	2.3	
11.3	4.8	1.0	4.4	.0	3.9	4.2	7.1	3.1	2.4	3.2	3.7	3.1	.3	1.4	1.8	
26.8	51.7	72.8	52.3	61.1	57.1	53.9	44.3	53.9	55.0	47.5	54.3	52.9	75.2	65.0	62.3	
12.7	24.1	18.4	29.4	23.6	31.0	25.5	19.8	31.6	32.8	37.5	28.4	32.1	18.9	25.5	27.0	
37.0	14.0	37.3	28.3	17.0	20.7	19.0	28.1	10.6	3.6	1.9	6.5	5.2	10.6	5.7	6.0	
42.9	25.4	46.7	55.7	61.4	58.6	38.1	38.4	62.5	77.9	78.9	75.6	75.3	61.0	44.9	53.8	
7.5	7.1	2.7	5.7	9.1	4.3	6.4	6.0	10.6	7.1	3.7	3.4	5.6	8.9	28.5	21.2	
5.8	49.0	4.0	2.4	1.1	13.8	30.6	21.3	.0	3.2	4.3	3.8	3.2	12.1	12.7	10.3	
3.6	1.6	8.0	1.9	4.5	.9	2.2	2.8	8.7	3.2	3.1	4.8	4.4	1.8	2.5	2.9	
3.1	3.1	1.3	6.1	6.8	1.7	3.7	3.5	7.7	5.1	8.1	5.8	6.3	5.7	5.6	5.8	
31.5	26.0	36.0	43.9	42.0	49.1	33.4	32.0	34.6	30.8	34.8	35.1	33.6	46.1	20.7	26.1	
14.2	15.2	14.7	9.0	9.1	11.2	13.2	12.4	6.7	5.9	1.2	5.2	4.8	8.9	11.0	9.3	
11.4	7.5	4.0	5.7	8.0	8.6	7.1	7.4	5.8	6.7	3.7	6.5	5.9	8.2	10.6	9.3	
6.7	8.1	5.3	4.2	4.5	3.4	6.5	6.2	2.9	2.4	1.9	5.8	3.6	7.8	11.6	9.3	
1.9	3.7	.0	.5	2.3	2.6	2.7	2.2	.0	2.4	4.3	6.2	3.8	1.4	2.6	2.8	
31.2	36.3	38.7	30.7	27.3	23.3	33.5	36.3	42.3	46.6	46.0	35.4	41.9	22.0	37.8	37.5	
3.1	3.1	1.3	6.1	6.8	1.7	3.7	3.5	7.7	5.1	8.1	5.8	6.3	5.7	5.6	5.8	
6.1	6.2	9.3	9.0	6.8	6.9	7.0	6.7	9.6	8.7	11.2	8.9	9.4	6.7	5.8	6.8	
16.4	24.1	12.0	17.0	21.6	19.8	21.4	20.3	24.0	16.2	21.1	15.5	17.9	15.2	13.6	14.8	
12.8	14.9	12.0	13.7	12.5	10.3	13.9	13.6	16.3	11.1	11.2	15.8	13.5	15.6	15.0	14.7	
7.0	6.4	4.0	7.5	6.8	6.9	6.5	6.3	1.9	8.3	8.7	6.5	6.9	5.7	7.2	7.0	
15.0	13.7	28.0	16.5	22.7	11.2	15.6	15.5	12.5	20.6	14.9	16.2	16.8	14.9	16.8	16.6	
3.8	2.5	.0	3.8	2.3	2.6	2.6	3.1	3.8	5.9	2.5	2.7	3.8	6.7	5.6	5.1	
8.9	7.4	5.3	5.7	5.7	3.4	6.4	7.2	5.8	8.3	5.0	4.5	5.9	12.8	9.2	8.7	
1.1	3.7	4.0	7.1	2.3	11.2	5.0	4.2	2.9	3.6	1.9	5.2	3.7	6.0	5.1	4.8	
12.3	12.9	8.0	9.4	8.0	10.3	11.3	11.9	12.5	4.7	9.3	12.4	9.4	6.0	9.8	9.4	
11.4	1.5	13.3	6.6	5.7	10.3	4.4	5.8	4.8	4.0	5.0	4.1	4.3	5.3	3.5	3.9	
5.3	6.8	4.0	3.8	5.7	6.9	6.0	5.2	5.8	8.7	9.3	8.2	8.3	5.0	8.3	8.0	

^{2/} Statistics are not presented because too few records contained the specified data.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 3
PERCENTAGE OF FY 1980 DOCTORATE RECIPIENTS BY SOURCES OF SUPPORT IN GRADUATE SCHOOL, BY SEX AND SUMMARY FIELD 1/

SOURCES OF SUPPORT IN GRADUATE SCHOOL		DOCTORATE RECIPIENTS BY FIELD															
		PHYSICAL SCIENCES 2/		ENGINEERING		LIFE SCIENCES		SOCIAL SCIENCES		HUMANITIES		PROF. FIELDS		EDUCATION		TOTAL	
		MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	
NSF FELLOWSHIP	N	206/ 23	92/ 2	95/ 43	59/ 60	15/ 9	1/ 0	46/ 16	554/ 153								
	VE	6.0/ 4.7	4.1/ 2.4	2.5/ 3.4	2.6/ 2.9	.7/ .6	.1/ .0	1.2/ .5	2.7/ 1.7								
	H%	37.2/ 15.0	16.6/ 1.3	17.1/ 28.1	17.9/ 39.2	2.7/ 5.9	.2/ .0	8.3/ 10.5	100.0/100.0								
NSF TRAINEESHIP	N	63/ 10	52/ 3	46/ 17	34/ 19	4/ 1	0/ 0	5/ 3	204/ 53								
	VE	1.8/ 2.1	2.3/ 3.7	1.2/ 1.3	.9/ .9	.2/ .1	.0/ .0	.1/ .1	1.0/ .6								
	H%	30.9/ 18.9	25.5/ 5.7	22.5/ 32.1	16.7/ 35.8	2.0/ 1.9	.0/ .0	2.5/ 5.7	100.0/100.0								
NIH FELLOWSHIP 3/	N	38/ 8	16/ 0	163/ 64	107/ 114	5/ 1	7/ 6	5/ 14	341/ 207								
	VE	1.1/ 1.6	.7/ .0	4.3/ 5.0	2.8/ 5.6	.2/ .1	.8/ 1.6	.1/ .4	1.7/ 2.3								
	H%	11.1/ 3.9	4.7/ .0	47.8/ 30.9	31.4/ 55.1	1.5/ .5	2.1/ 2.9	1.5/ 6.8	100.0/100.0								
NIH TRAINEESHIP 3/	N	50/ 12	31/ 1	668/ 294	216/ 181	3/ 3	7/ 9	5/ 10	980/ 510								
	VE	1.5/ 2.5	1.4/ 1.2	17.5/ 23.0	5.6/ 8.8	.1/ .2	.8/ 2.5	.1/ .3	4.8/ 5.7								
	H%	5.1/ 2.4	3.2/ .2	68.2/ 57.6	22.0/ 35.5	.3/ .6	.7/ 1.8	.5/ 2.0	100.0/100.0								
NOEA FELLOWSHIP	N	27/ 4	17/ 1	14/ 4	88/ 39	156/ 131	16/ 2	45/ 33	363/ 214								
	VE	.8/ .8	.8/ 1.2	.4/ .3	2.3/ 1.9	7.2/ 9.1	1.8/ .5	1.1/ 1.0	1.8/ 2.4								
	H%	7.4/ 1.9	4.7/ .5	3.9/ 1.9	24.2/ 18.2	43.0/ 61.2	4.4/ .9	12.4/ 15.4	100.0/100.0								
GRADUATE & PROF. OPPORTUNITIES PROGRAM	N	1/ 4	1/ 0	3/ 3	3/ 3	2/ 1	1/ 0	8/ 10	19/ 21								
	VE	.0/ .8	.0/ .0	.1/ .2	.1/ .1	.1/ .1	.1/ .0	.2/ .3	.1/ .2								
	H%	5.3/ 19.0	5.3/ .0	15.8/ 14.3	15.8/ 14.3	10.5/ 4.8	5.3/ .0	42.1/ 47.6	100.0/100.0								
NATIONAL DIRECT STUDENT LOANS	N	148/ 14	79/ 3	329/ 95	585/ 351	344/ 260	74/ 36	401/ 292	1960/ 991								
	VE	4.3/ 2.9	3.5/ 3.7	8.6/ 7.4	15.3/ 17.1	15.8/ 13.9	8.2/ 9.9	10.1/ 9.2	9.6/ 11.2								
	H%	7.6/ 1.4	4.0/ .3	16.8/ 9.6	29.8/ 35.4	17.6/ 20.2	3.8/ 3.6	20.5/ 29.5	100.0/100.0								
OTHER NEW	N	38/ 5	25/ 1	118/ 91	201/ 209	23/ 13	44/ 43	140/ 194	589/ 556								
	VE	1.1/ 1.0	1.1/ 1.2	3.1/ 7.1	5.3/ 10.2	1.1/ .9	4.9/ 11.8	3.5/ 6.1	2.9/ 6.3								
	H%	6.5/ .9	4.2/ .2	20.0/ 16.4	34.1/ 37.6	3.9/ 2.3	7.5/ 7.7	23.8/ 34.9	100.0/100.0								
GI BILL	N	230/ 2	131/ 0	307/ 9	407/ 12	248/ .2	137/ 2	551/ 21	2011/ 48								
	VE	6.7/ .4	5.8/ .0	8.0/ .7	10.6/ .6	11.4/ .1	15.1/ .5	13.9/ .7	9.9/ .5								
	H%	11.4/ 4.2	6.5/ .0	15.3/ 18.8	20.2/ 25.0	12.3/ 4.2	6.8/ 4.2	27.4/ 43.8	100.0/100.0								
OTHER FEDERAL 4/ SUPPORT	N	197/ 34	216/ 5	185/ 64	288/ 150	83/ 46	41/ 19	118/ 74	1128/ 392								
	VE	5.7/ 7.0	9.6/ 6.1	4.8/ 5.0	7.5/ 7.3	3.8/ 3.2	4.5/ 5.2	3.0/ 2.3	5.5/ 4.4								
	H%	17.5/ 8.7	19.1/ 1.3	16.4/ 16.3	25.5/ 38.3	7.4/ 11.7	3.6/ 4.8	10.5/ 18.9	100.0/100.0								
OTHER NATIONAL 5/ FELLOWSHIP	N	61/ 16	26/ 3	68/ 26	135/ 99	150/ 110	10/ 11	57/ 73	507/ 338								
	VE	1.8/ 3.3	1.2/ 3.7	1.8/ 2.0	3.5/ 4.8	6.9/ 7.6	1.1/ 3.0	1.4/ 2.3	2.5/ 3.8								
	H%	12.0/ 4.7	5.1/ .9	13.4/ 7.7	26.6/ 29.3	29.6/ 32.5	2.0/ 3.3	11.2/ 21.6	100.0/100.0								
UNIVERSITY FELLOWSHIP	N	733/ 126	346/ 18	573/ 263	857/ 404	742/ 491	157/ 62	309/ 311	3717/ 1675								
	VE	21.3/ 25.9	15.4/ 22.0	15.0/ 20.6	22.4/ 19.7	34.1/ 34.1	17.3/ 17.0	7.8/ 9.7	18.2/ 18.8								
	H%	19.7/ 7.5	9.3/ 1.1	15.4/ 15.7	23.1/ 24.1	20.0/ 29.3	4.2/ 3.7	8.3/ 18.6	100.0/100.0								
TEACHING ASSISTANTSHIP	N	2453/ 353	890/ 39	1558/ 564	1977/ 952	1387/ 943	395/ 162	908/ 805	9568/ 3818								
	VE	71.4/ 72.6	39.6/ 47.6	40.8/ 46.2	51.7/ 46.5	63.7/ 65.6	43.6/ 44.4	22.9/ 25.2	46.9/ 43.0								
	H%	25.6/ 9.2	9.3/ 1.0	16.3/ 14.8	20.7/ 24.9	14.5/ 24.7	4.1/ 4.2	9.5/ 21.1	100.0/100.0								
RESEARCH ASSISTANTSHIP	N	2272/ 311	1485/ 56	1976/ 565	1350/ 642	284/ 170	228/ 104	594/ 455	8189/ 2303								
	VE	66.1/ 64.0	66.1/ 68.3	51.7/ 44.3	35.3/ 31.3	13.1/ 11.8	25.2/ 28.5	15.0/ 14.3	40.2/ 25.9								
	H%	27.7/ 13.5	18.1/ 2.4	24.1/ 24.5	16.5/ 27.9	3.5/ 7.4	2.8/ 4.5	7.3/ 19.8	100.0/100.0								
EDUC. FUNDS OF INDUSTRY	N	159/ 36	195/ 11	96/ 33	65/ 36	28/ 13	48/ 14	85/ 61	676/ 204								
	VE	4.6/ 7.4	8.7/ 13.4	2.5/ 2.6	1.7/ 1.8	1.3/ .9	5.3/ 3.8	2.1/ 1.9	3.3/ 2.3								
	H%	23.5/ 17.6	28.8/ 5.4	14.2/ 16.2	9.6/ 17.6	4.1/ 6.4	7.1/ 6.9	12.6/ 29.9	100.0/100.0								
OTHER INSTITUTION FUNDS	N	166/ 31	105/ 4	282/ 128	303/ 214	186/ 146	75/ 43	345/ 279	1462/ 845								
	VE	4.8/ 6.4	4.7/ 4.9	7.4/ 10.0	7.9/ 10.4	8.5/ 10.2	8.3/ 11.8	8.7/ 8.7	7.2/ 9.5								
	H%	11.4/ 3.7	7.2/ .5	19.3/ 15.1	20.7/ 25.3	12.7/ 17.3	5.1/ 5.1	23.6/ 33.0	100.0/100.0								
OWN EARNINGS	N	914/ 108	773/ 27	1233/ 424	2238/ 1209	1399/ 883	588/ 242	3116/ 2395	10221/ 5288								
	VE	26.6/ 22.2	34.4/ 32.9	32.3/ 33.2	58.5/ 59.0	62.5/ 61.4	65.0/ 66.3	78.4/ 75.1	50.1/ 59.5								
	H%	8.9/ 2.0	7.6/ .5	12.1/ 8.0	21.9/ 22.9	13.3/ 16.7	5.8/ 4.6	30.5/ 45.3	100.0/100.0								
SPOUSE'S EARNINGS	N	793/ 110	388/ 12	1140/ 321	1241/ 621	798/ 537	301/ 121	1356/ 1245	6017/ 2967								
	VE	23.1/ 22.6	17.3/ 14.6	29.8/ 25.2	32.4/ 30.3	36.7/ 37.3	33.3/ 33.2	34.1/ 39.0	29.5/ 33.4								
	H%	13.2/ 3.7	6.4/ .4	18.9/ 10.8	20.6/ 20.9	13.3/ 18.1	5.0/ 4.1	22.5/ 42.0	100.0/100.0								
FAMILY CONTRIBUTIONS	N	400/ 64	340/ 14	597/ 205	766/ 423	481/ 335	123/ 59	451/ 430	3158/ 1530								
	VE	11.6/ 13.2	15.1/ 17.1	15.6/ 16.1	20.0/ 20.7	22.1/ 23.3	13.6/ 16.2	11.4/ 13.5	15.5/ 17.2								
	H%	12.7/ 4.2	10.8/ .9	18.9/ 13.4	24.3/ 27.6	15.2/ 21.9	3.9/ 3.9	14.3/ 28.1	100.0/100.0								
OTHER LOANS	N	196/ 18	139/ 5	331/ 89	572/ 293	270/ 165	101/ 39	445/ 317	2054/ 926								
	VE	5.7/ 3.7	6.2/ 6.1	8.7/ 7.0	14.9/ 14.3	12.4/ 11.5	11.2/ 10.7	11.2/ 9.9	10.1/ 10.4								
	H%	9.5/ 1.9	6.8/ .5	16.1/ 9.6	27.8/ 31.6	13.1/ 17.8	4.9/ 4.2	21.7/ 34.2	100.0/100.0								
OTHER	N	174/ 20	200/ 7	376/ 97	267/ 143	151/ 96	93/ 21	280/ 195	1541/ 579								
	VE	5.1/ 4.1	8.9/ 8.5	9.8/ 7.6	7.0/ 7.0	6.9/ 6.7	10.3/ 5.8	7.0/ 6.1	7.6/ 6.5								
	H%	11.3/ 3.5	13.0/ 1.2	24.4/ 16.8	17.3/ 24.7	9.8/ 16.6	6.0/ 3.6	16.2/ 33.7	100.0/100.0								
UNOPLICATED TOTAL	N	3436/ 486	2248/ 82	3820/ 1276	3827/ 2048	2176/ 1438	905/ 365	3973/ 3191	20385/ 8886 6/								

1/ Data are not comparable with data prior to 1977 because of a change in the survey question on source of support. Frequencies as reported are not reliable but relative frequencies should serve as useful approximations.

2/ Includes mathematics and computer sciences.

3/ The sources NIH Fellowship and NIH Traineeship refer to support provided under the National Research Service Awards Act of 1974.

4/ Includes AEC/ERDA Fellowship and NASA Traineeship which were formerly shown separately.

5/ Includes Woodrow Wilson Fellowship which was formerly shown separately.

6/ The 27 individuals shown in Table 1 as having subfield "Other and Unspecified" and the Ph.D.'s who did not report source of support are omitted from this table.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 4
NUMBER OF DOCTORATE RECIPIENTS BY SEX, STATE OF DOCTORAL INSTITUTION, AND SUMMARY FIELD, FY 1980 1/

STATE OF DOCTORAL INSTITUTION	NUMBER OF DOCTORATE RECIPIENTS BY FIELD																	
	PHYSICAL SCIENCES 2/		ENGI- NEERING		LIFE SCIENCES		SOCIAL SCIENCES		HUMANITIES		PROF. FIELDS		EDUCATION		OTHER & UNSPEC.		TOTAL	
	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	MEN/WOMEN	
U.S. TOTAL	3012	502	2389	90	3983	1342	4088	2165	2335	1528	970	375	4201	3375	17	10	21595	9387
ALABAMA	12	1	21	0	44	16	12	9	6	11	6	1	62	49	0	0	163	87
ALASKA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARIZONA	55	5	20	2	65	19	43	27	15	16	13	1	69	61	0	0	286	131
ARKANSAS	4	1	3	2	19	4	10	4	7	4	19	1	18	13	0	0	80	29
CALIFORNIA	559	84	405	18	459	168	610	326	270	171	91	32	248	225	1	0	2643	1024
COLORADO	95	6	43	1	80	24	71	48	25	15	8	6	117	80	0	0	439	180
CONNECTICUT	76	12	15	1	50	25	76	29	81	54	8	0	35	29	0	0	341	150
DELAWARE	18	1	14	1	3	1	10	6	8	4	0	0	1	3	0	0	54	16
D. C.	39	6	24	0	28	38	90	48	51	37	27	8	37	31	0	0	296	168
FLORIDA	72	13	24	1	113	23	148	55	40	40	29	14	364	274	0	0	790	420
GEORGIA	49	5	31	0	45	12	84	45	23	23	29	6	86	80	0	0	347	171
HAWAII	16	0	2	0	23	3	21	10	17	5	0	0	1	3	0	0	80	21
IDAH0	7	1	4	1	14	0	6	1	3	0	0	0	13	5	0	0	47	8
ILLINOIS	206	25	185	2	195	75	238	108	164	90	47	22	205	194	2	0	1242	516
INDIANA	105	9	98	5	117	33	115	42	106	58	37	18	164	98	1	0	743	263
IOWA	64	9	51	2	82	25	63	15	43	23	12	7	80	53	0	0	395	134
KANSAS	29	2	21	0	72	15	54	27	18	17	7	4	70	50	0	0	271	115
KENTUCKY	17	3	13	0	38	17	31	7	9	20	22	1	9	12	1	0	140	60
LOUISIANA	25	5	11	0	46	17	27	18	26	21	53	6	37	25	0	0	225	92
MAINE	2	2	0	0	3	0	1	1	3	0	0	0	2	3	0	0	11	6
MARYLAND	69	10	30	2	79	40	79	25	49	32	9	5	46	52	0	0	361	166
MASSACHUSETTS	246	41	169	8	161	80	223	106	151	92	72	19	206	203	1	0	1229	549
MICHIGAN	109	15	91	4	210	45	188	76	86	61	30	18	223	157	0	1	937	377
MINNESOTA	37	7	36	2	105	27	70	43	34	21	12	3	40	50	0	0	334	153
MISSISSIPPI	12	1	9	0	35	1	35	9	6	4	9	3	55	47	0	0	161	65
MISSOURI	53	13	53	3	68	22	72	38	40	28	31	15	126	66	0	0	443	185
MONTANA	10	1	0	0	11	2	7	3	1	0	0	0	16	5	0	0	45	11
NEBRASKA	16	2	2	0	56	7	25	9	9	8	16	2	45	24	0	0	169	52
NEVADA	4	1	0	0	4	2	3	2	0	0	0	0	8	3	0	0	19	8
NEW HAMPSHIRE	21	5	3	0	10	2	6	2	1	1	0	0	1	0	0	0	42	10
NEW JERSEY	86	15	51	2	63	25	66	28	55	36	8	7	51	55	0	1	380	169
NEW MEXICO	19	1	12	2	22	4	11	11	18	5	1	0	30	28	0	0	113	51
NEW YORK	386	49	203	5	351	151	510	428	295	226	63	39	330	309	3	0	2141	1207
NORTH CAROLINA	74	17	33	1	135	58	81	69	69	43	7	5	71	58	0	0	470	251
NORTH DAKOTA	6	1	0	0	29	5	5	7	5	0	0	0	16	9	0	0	61	22
OHIO	125	26	119	5	131	44	184	77	85	44	40	24	207	165	3	0	894	385
OKLAHOMA	31	2	53	1	53	16	38	12	16	15	16	6	73	41	0	0	280	93
OREGON	45	7	10	0	64	9	47	22	24	11	11	3	63	38	0	0	264	90
PENNSYLVANIA	183	15	143	2	139	62	192	105	118	84	57	33	261	182	3	5	1096	488
RHODE ISLAND	60	10	21	1	19	4	17	13	25	32	1	0	0	0	0	0	143	60
SOUTH CAROLINA	33	3	5	1	26	8	20	8	14	3	8	1	24	30	0	0	130	54
SOUTH DAKOTA	1	0	1	0	5	0	6	0	0	0	0	0	18	4	0	0	31	4
TENNESSEE	35	4	36	3	58	16	65	41	37	22	10	14	105	94	0	0	346	194
TEXAS	190	22	133	5	211	88	147	83	114	56	98	30	220	217	0	2	1113	503
UTAH	44	3	34	2	51	11	58	22	20	4	12	3	109	54	1	0	329	99
VERMONT	6	1	1	0	7	1	3	6	1	2	0	0	0	0	0	0	18	10
VIRGINIA	46	6	54	1	84	15	53	17	30	22	12	5	82	73	0	0	361	139
WASHINGTON	73	13	34	3	112	31	54	29	38	23	18	7	36	39	1	0	366	145
WEST VIRGINIA	9	4	9	0	25	5	13	4	9	2	0	0	35	29	0	0	100	44
WISCONSIN	115	14	48	1	146	45	94	40	69	40	21	6	70	48	0	1	563	195
WYOMING	14	1	5	0	17	1	6	4	1	0	0	0	16	7	0	0	59	13
PUERTO RICO	4	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4	4

1/ Refer to explanatory note on page 23.

2/ Includes mathematics and computer sciences.

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

TABLE 5
STATISTICAL PROFILE OF DOCTORATE RECIPIENTS BY RACIAL OR ETHNIC GROUP AND U.S. CITIZENSHIP STATUS, FY 1980 ^{1/}

		TOTAL				AMERICAN INDIAN	ASIAN				BLACK			
		U.S.	NON-U.S.	TEMP.	TOTAL	TOTAL	U.S.	NON-U.S.	TEMP.	TOTAL	U.S.	NON-U.S.	TEMP.	TOTAL
		PERM.	PERM.	PERM.			PERM.	PERM.	PERM.		PERM.	PERM.	PERM.	
TOTAL NUMBER		2510 ³	1286	3632	30982 ^{3/}	106	456	641	1469	2612 ^{4/}	1021	74	327	1430 ^{4/}
MALE	VS	66.9	75.5	86.5	69.7	65.1	68.4	79.9	87.1	82.2	48.5	85.1	92.0	60.3
FEMALE	VS	33.1	24.5	13.5	30.3	34.9	31.6	20.1	12.9	17.8	51.5	14.9	8.0	39.7
DOCTORAL FIELD														
PHYSICAL SCIENCES ^{6/}	VS	12.2	19.6	18.9	13.3	6.6	16.4	25.4	24.5	23.2	2.4	5.4	6.1	3.5
ENGINEERING	VS	9.0	23.3	23.4	8.0	2.8	16.0	32.0	30.4	28.3	1.1	9.5	11.9	4.0
LIFE SCIENCES	VS	17.1	17.6	19.5	17.2	10.4	21.9	19.8	16.7	18.3	5.7	13.5	25.4	10.6
SOCIAL SCIENCES	VS	21.1	15.6	14.5	20.2	17.0	17.8	10.5	12.2	12.9	19.3	33.8	16.2	19.4
ARTS & HUMANITIES	VS	13.4	10.4	5.6	12.5	8.5	8.8	4.4	4.0	4.9	9.4	9.5	7.0	8.8
EDUCATION	VS	26.8	8.7	14.0	24.5	50.0	14.0	4.4	9.9	9.2	57.4	21.6	27.8	48.7
PROFESSIONS & OTHER	VS	4.4	4.9	4.0	4.4	4.7	5.0	3.6	2.2	3.1	4.7	6.8	5.5	5.0
MEDIAN AGE AT DOCTORATE														
		32.2	32.1	32.0	32.2	35.9	34.0	31.4	31.1	31.4	36.9	35.6	34.4	36.0
MEDIAN TIME LAPSE BA-PhD														
TOTAL TIME		9.4	8.9	8.6	9.3	11.6	10.6	8.9	8.5	8.9	12.9	8.9	7.8	11.1
REGISTERED TIME		6.4	6.2	5.6	6.3	6.4	7.0	6.2	5.8	6.1	7.0	6.1	5.1	6.4
GRADUATE SCHOOL SUPPORT														
FEDERAL FELLOW/TRAINEE	VS	21.3	9.2	7.0	18.5	22.6	21.7	10.0	7.9	10.8	19.1	2.7	4.0	14.9
GI BILL	VS	8.2	.1	.1	6.6	8.5	3.5	.0	.1	.7	6.5	.0	.0	4.6
OTHER FELLOWSHIP	VS	20.0	21.2	19.1	19.4	17.9	18.4	20.3	18.9	18.9	26.6	13.5	20.2	24.4
TEACHING ASSISTANTSHIP	VS	45.4	48.4	37.4	43.2	35.8	43.9	50.1	44.9	49.4	24.8	40.5	24.8	25.5
RESEARCH ASSISTANTSHIP	VS	32.9	51.0	43.7	33.9	25.5	45.0	62.4	57.3	55.5	14.0	28.4	23.5	16.9
EDUC./INST. FUNDS	VS	10.7	9.6	8.7	10.1	6.6	12.3	10.0	8.4	9.3	10.8	13.5	11.9	11.1
OWN/SPOUSE EARNINGS	VS	68.9	49.9	27.8	61.2	73.6	62.5	41.2	21.2	33.0	72.6	67.6	36.7	63.8
FAMILY CONTRIBUTIONS	VS	15.1	17.9	18.1	15.1	10.4	14.3	18.3	22.4	19.6	10.6	12.2	11.6	10.8
NATL DIRECT SFONT LOAN	VS	11.3	6.2	.7	9.5	21.7	11.6	4.1	.5	3.3	18.8	12.2	.6	14.2
OTHER LOANS	VS	10.7	9.1	5.0	9.6	12.3	10.1	5.6	3.7	5.2	16.0	17.6	6.1	13.7
OTHER	VS	4.0	5.5	29.0	6.8	4.7	2.9	1.9	13.0	8.3	5.1	8.1	46.2	14.7
UNKNOWN	VS	2.3	2.3	3.9	5.4	1.9	.4	2.2	2.9	3.7	1.8	2.7	3.7	2.6
POSTDOCTORAL STUDY PLANS														
PLANNED EMPLOYMENT AFTER DOCTORATE	VS	17.9	24.1	24.4	18.4	12.3	25.2	28.1	31.8	29.2	6.3	14.9	14.1	8.5
	VS	79.0	72.9	70.0	75.3	84.0	73.7	69.9	64.2	66.4	90.5	85.1	81.0	87.8
EDUC. INSTITUTION	VS	48.3	32.5	40.4	45.3	56.6	34.0	21.1	32.7	29.7	64.0	45.9	46.5	58.8
INDUSTRY/BUSINESS	VS	12.6	29.2	12.0	12.9	11.3	24.3	39.9	18.4	24.4	4.5	19.9	6.1	5.6
GOVERNMENT	VS	9.1	3.7	11.5	8.9	11.3	8.1	3.4	7.6	6.6	12.2	5.4	20.8	13.8
NON-PROFIT	VS	5.4	3.8	2.1	4.8	2.8	4.6	3.0	2.0	2.6	5.5	2.7	1.8	4.5
OTHER & UNKNOWN	VS	3.6	3.7	4.0	3.5	1.9	2.6	2.5	3.5	3.1	4.3	12.2	5.8	5.0
POSTDOCT STATUS UNKNOWN														
	VS	3.1	3.0	5.5	6.3	3.8	1.1	2.0	4.0	4.4	3.2	.0	4.9	3.8
DEFINITE POSTDOCT STUDY														
SEEKING POSTDOCT STUDY	VS	14.0	14.2	15.9	13.8	10.4	19.3	16.2	20.4	18.8	3.9	5.4	7.6	4.8
DEFINITE EMPLOYMENT	VS	3.9	9.9	8.5	4.6	1.9	5.9	11.9	11.4	10.4	2.4	9.5	6.4	3.6
SEEKING EMPLOYMENT	VS	59.5	48.6	50.3	56.2	58.5	49.3	48.8	44.9	46.0	65.6	41.9	55.4	61.9
	VS	19.5	24.3	19.7	19.1	25.5	24.3	21.1	19.3	20.4	24.9	43.2	25.7	25.9
EMPLOYMENT LOCATION														
AFTER DOCTORATE														
U.S.	VS ^{7/}	93.2	87.4	25.8	85.9	87.1	93.3	85.9	42.7	63.6	89.0	93.9	13.3	73.1
FOREIGN	VS ^{7/}	1.4	5.9	67.7	8.6	1.6	.9	6.7	49.5	29.2	1.2	.0	79.6	17.3
UNKNOWN	VS ^{7/}	5.4	6.7	6.5	5.6	11.3	5.8	7.3	7.7	7.2	9.9	16.1	7.7	9.6

^{1/} Data not comparable with data for earlier years because of changes in the survey question on racial/ethnic group. See discussion on page 23.

^{2/} Earlier versions of the racial/ethnic questionnaire item have grouped all Puerto Ricans, Mexican-Americans, and other Hispanics into one broad "Hispanic" category. All individuals who checked this category on the 7,309 old forms still in circulation during the 1980 survey year have been included in "Other Hispanic."

^{3/} Includes 958 individuals who did not report their citizenship at time of doctorate.

^{4/} Includes individuals who did not report their citizenship at time of doctorate.

^{5/} Includes those who provided no usable response to the item on "racial or ethnic group."

^{6/} Includes mathematics and computer sciences.

^{7/} The base for this VS is the number of doctorates in the column caption group who have found definite employment.

TABLE 5. CONTINUED

WHITE				PUERTO RICAN	MEXICAN-AMERICAN				OTHER HISPANIC 2/				OTHER & UNKNOWN		
U.S.	NON-U.S.		TOTAL	TOTAL	U.S.	NON-U.S.		TOTAL	U.S.	NON-U.S.		TOTAL	U.S.	NON-U.S.	TOTAL
	PERM.	TEMP.				PERM.	TEMP.			PERM.	TEMP.				
21858	468	1327	23666 4/	69	103	6	38	148 4/	239	66	290	602 4/	1256	212	2349 4/5/
67.5	69.7	84.9	68.5	68.1	68.0	83.3	92.1	75.0	58.2	65.2	84.5	72.1	73.2	84.0	72.8
32.5	30.3	15.1	31.5	31.9	32.0	16.7	7.9	25.0	41.8	34.8	15.5	27.9	26.8	16.0	27.2
12.4	15.0	17.1	12.7	5.8	5.8	16.7	23.7	11.5	6.7	12.1	14.5	11.3	18.0	17.0	15.1
4.9	16.0	21.3	6.0	4.3	1.0	.0	23.7	6.8	6.3	13.6	13.8	10.8	6.5	16.5	7.5
17.5	16.2	16.4	17.4	4.3	5.8	16.7	36.8	14.2	10.9	10.6	39.7	24.6	19.5	18.9	16.3
21.4	18.8	16.1	21.0	26.1	20.4	33.3	7.9	17.6	23.0	15.2	14.8	18.3	19.0	20.3	21.0
13.7	15.0	7.5	13.4	17.4	13.6	16.7	.0	10.1	22.2	34.8	4.8	15.1	12.4	7.1	13.5
25.7	12.4	15.5	24.9	34.8	50.5	.0	7.9	37.2	28.9	12.1	9.3	17.4	20.2	17.5	22.0
4.4	6.6	6.2	4.6	7.2	2.9	16.7	.0	2.7	2.1	1.5	3.1	2.5	4.3	2.8	4.6
32.1	32.6	32.0	32.1	32.6	34.7	35.0	31.1	34.1	33.4	34.8	34.0	33.9	31.7	32.3	31.8
9.3	8.8	4.5	9.2	9.8	10.6	12.0	7.3	10.2	9.9	8.8	9.3	9.4	8.9	8.8	9.0
6.4	6.2	5.7	6.3	6.3	6.9	6.3	5.0	6.6	6.9	6.3	4.9	5.9	6.3	5.9	6.2
21.7	9.2	6.6	20.6	26.1	26.2	.0	.0	18.2	23.8	9.1	8.3	14.5	15.9	7.1	9.2
8.5	.2	.1	7.9	11.6	9.7	.0	.0	6.8	7.1	.0	.3	3.0	5.8	.0	3.1
19.9	22.4	20.8	20.0	36.2	34.0	33.3	7.9	27.0	23.4	25.8	16.6	20.1	14.3	15.1	9.1
47.3	47.4	38.7	46.8	27.5	26.2	16.7	28.9	26.4	41.4	53.0	18.6	31.2	34.2	25.0	20.7
34.1	42.3	40.6	34.6	20.3	16.5	16.7	39.5	22.3	20.5	37.9	23.4	23.6	27.1	26.4	17.0
10.8	8.5	8.1	10.6	17.4	11.7	.0	2.6	8.8	11.7	7.6	10.7	10.6	8.0	9.0	5.2
70.2	58.8	34.1	67.9	60.9	69.9	83.3	21.1	57.4	65.7	47.0	31.4	46.3	46.3	21.7	26.9
15.8	17.9	18.2	16.0	18.8	9.7	.0	15.8	10.8	12.1	24.2	8.6	11.6	8.6	9.9	5.6
11.1	7.5	.9	10.4	27.5	20.4	16.7	2.6	15.5	14.2	9.1	.3	6.8	6.8	2.4	3.9
10.7	10.9	5.7	10.4	14.5	13.6	16.7	13.2	13.5	9.2	15.2	6.9	8.6	5.9	5.7	3.7
4.0	8.8	34.7	5.8	5.8	2.9	.0	55.3	16.2	3.8	15.2	52.4	28.4	2.5	36.8	4.7
1.0	2.1	3.0	1.2	.0	2.9	.0	7.9	4.7	2.1	4.5	3.6	4.2	26.6	16.5	52.8
18.5	21.2	22.9	18.8	8.7	6.8	16.7	7.9	7.4	13.0	13.6	14.1	13.5	17.5	17.0	11.0
79.7	74.4	71.7	79.1	91.3	90.3	83.3	86.8	88.5	83.3	84.8	80.3	81.2	55.8	64.2	36.4
48.8	42.5	45.1	48.4	66.7	60.2	50.0	42.1	54.7	54.0	59.1	49.0	51.7	29.1	39.6	19.7
12.9	20.7	9.0	12.8	5.8	7.8	.0	5.3	6.8	8.4	4.5	5.9	6.6	12.4	6.6	7.3
9.1	3.0	11.5	9.1	10.1	11.7	16.7	28.9	16.2	7.5	9.1	17.7	12.3	6.5	11.3	4.6
5.5	4.7	2.2	5.3	2.9	4.9	16.7	.0	4.1	5.9	6.1	3.8	4.8	4.2	1.4	2.4
3.5	3.4	3.8	3.5	5.8	5.8	.0	10.5	6.8	7.5	6.1	4.5	5.8	3.6	5.2	2.4
1.8	4.5	5.4	2.1	.0	2.9	.0	5.3	4.1	3.8	1.5	5.5	5.3	26.7	18.9	52.6
14.6	12.8	15.4	14.6	7.2	2.9	.0	5.3	3.4	10.0	12.1	10.0	10.1	13.0	11.3	8.0
3.9	8.3	7.5	4.2	1.4	3.9	16.7	2.6	4.1	2.9	1.5	4.1	3.3	4.5	5.7	3.0
60.5	49.8	52.1	59.8	63.8	62.1	66.7	71.1	64.2	56.1	50.0	61.4	57.5	41.0	47.6	26.6
19.2	24.6	19.5	19.3	27.5	28.2	16.7	15.8	24.3	27.2	34.8	19.0	23.8	14.8	16.5	9.8
93.6	88.4	20.2	89.9	90.9	87.5	100.0	3.7	64.2	93.3	93.9	9.6	50.0	90.5	17.8	78.2
1.4	5.6	74.7	5.1	.0	.0	.0	85.2	24.2	.7	6.1	86.0	45.1	1.7	74.3	14.1
5.0	6.0	5.1	5.0	9.1	12.5	.0	11.1	11.6	6.0	.0	4.5	4.9	7.8	7.9	7.7

SOURCE: NRC, Commission on Human Resources, Doctorate Records File.

SURVEY OF EARNED DOCTORATES

NSF Form 558 1979
OMB No. 99-R0290
Approval Expires June 30, 1981

This form is to be returned to the GRADUATE DEAN, for forwarding to Commission on Human Resources

National Research Council

2101 Constitution Avenue, Washington, D. C. 20418

Please print or type.

1. Name in full: (9-30)
(Last Name) (First Name) (Middle Name)
Cross Reference: Maiden name or former name legally changed
2. Permanent address through which you could always be reached: (Care of, if applicable)
(Number) (Street) (City)
(State) (Zip Code) (Or Country if not U.S.)
3. U.S. Social Security Number: (31-39)
4. Date of birth: Place of birth:
(10-14) (Month) (Day) (Year) (15-18) (State) (Or Country if not U.S.)
5. Sex: 1 ☐ Male 2 ☐ Female (17)
6. Marital status: 1 ☐ Married 2 ☐ Not married (including widowed, divorced) (18)
7. Citizenship: 0 ☐ U.S. native 2 ☐ Non U.S., Immigrant (Permanent Resident) (19)
1 ☐ U.S. naturalized 3 ☐ Non-U.S., Non-Immigrant (Temporary Resident)
If Non-U.S., indicate country of present citizenship (20-21)
8. Racial or ethnic group: (Check only one.) *A person having origins in —*
0 ☐ American Indian or Alaskan Native any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.
1 ☐ Asian or Pacific Islander any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.
2 ☐ Black, not of Hispanic Origin any of the black racial groups of Africa.
3 ☐ White, not of Hispanic Origin any of the original peoples of Europe, North Africa, or the Middle East.
4 ☐ Puerto Rican Puerto Rico, regardless of race.
5 ☐ Mexican-American Mexico, regardless of race.
6 ☐ Other Hispanic Central or South America, Cuba, or other Spanish culture, regardless of race. (22-24)
9. Number of dependents: Do not include yourself. (Dependent = someone receiving at least one half of his or her support from you) (25)

EDUCATION

10. High school last attended: (26-27)
(School Name) (City) (State)
Year of graduation from high school: (28-29)
11. List in the table below all collegiate and graduate institutions you have attended including 2-year colleges. List chronologically, and include your doctoral institution as the last entry.

Institution Name	Location	Years Attended		Major Field		Minor Field	Degree (if any)		
		From	To	Use Specialties List			Title of Degree	Granted Mo.	Yr.
				Name	Number	Number			

12. Enter below the title of your doctoral dissertation and the most appropriate classification number and field. If a project report or a musical or literary composition (not a dissertation) is a degree requirement, please check box. ☐ (12)

Title

Classify using Specialties List

Number

Name of field

13. Name the department (or interdisciplinary committee, center, institute, etc.) and school or college of the university which supervised your doctoral program:
(Department/Institute/Committee/Program) (School)

14. Name of your adviser for dissertation, project report or music/literary composition:
(Last Name) (First Name) (Middle Initial)

continued on next page

SURVEY OF EARNED DOCTORATES, Cont.

15. Please enter a "1" beside your primary source of support during graduate study. Enter a "2" beside your secondary source of support during graduate study. Check (.) all other sources from which support was received.

- | | | | |
|--|--|---|---------------------------|
| a — NSF Fellowship | h — AEC/ERDA/DOE Fellowship | n — University Fellowship | s — Own earnings |
| b — NSF Traineeship | i — NASA Traineeship | o — Teaching Assistantship | t — Spouse's earnings |
| c — NIH Fellowship | j — GI Bill | p — Research Assistantship | u — Family contributions |
| d — NIH Traineeship | k — Other Federal support | q — Educational fund of industrial or business firm | v — Loans (NDSL direct) |
| e — NDEA Fellowship | (specify) | r — Other institutional funds (specify) | w — Other loans |
| f — Title IX Graduate & Professional Opportunities Pgm. Fellowship | l — Woodrow Wilson Fellowship | | x — Other (specify) |
| g — Other HEW | m — Other U.S. national fellowship (specify) | | |

16. Please check the space which most fully describes your status during the year immediately preceding the doctorate. (26-49)

- | | | | |
|--|---|--|---|
| 0 ☐ Held fellowship | Full-time employed in: (Other than 0, 1, 2) { | 5 ☐ College or university, teaching | (12) ☐ Any other (specify) |
| 1 ☐ Held assistantship | | 6 ☐ College or university, non-teaching | |
| 2 ☐ Held own research grant | | 7 ☐ Elem. or sec. school, teaching | |
| 3 ☐ Not employed | | 8 ☐ Elem. or sec. school, non-teaching | |
| 4 ☐ Part-time employed | | 9 ☐ Industry or business | |
| | | (11) ☐ Other (specify) | |

POSTGRADUATION PLANS

17. How well defined are your postgraduation plans?

- 0 ☐ Am returning to, or continuing in, predoctoral employment
- 1 ☐ Have signed contract or made definite commitment
- 2 ☐ Am negotiating with one or more specific organizations
- 3 ☐ Am seeking appointment but have no specific prospects
- 4 ☐ Other (specify) (51)

18. What are your immediate postgraduation plans?

- 0 ☐ Postdoctoral fellowship
- 1 ☐ Postdoctoral research associateship
- 2 ☐ Traineeship
- 3 ☐ Other study (specify)
- 4 ☐ Employment (other than 0, 1, 2, 3)
- 5 ☐ Military service
- 6 ☐ Other (specify) (52)
- Go to Item "19"
- Go to Item "20"

19. If you plan to be on a postdoctoral fellowship, associateship, traineeship or other study

- a. What was the most important reason for taking a postdoctoral appointment? (Check only one.)

- 0 ☐ To obtain additional research experience in my doctoral field
- 1 ☐ To work with a particular scientist or research group
- 2 ☐ To switch into a different field of research
- 3 ☐ Could not obtain the desired type of employment position
- 4 ☐ Other reason (specify) (53)

- b. What will be the field of your postdoctoral study?

Please enter number from Specialties List (54-56)

What will be the primary source of research support?

- 0 ☐ U.S. Government
- 1 ☐ College or university
- 2 ☐ Private foundation
- 3 ☐ Nonprofit, other than private foundation
- 4 ☐ Other (specify)
- 6 ☐ Unknown (57)

Go to Item "21"

20. If you plan to be employed, enter military service, or other —

- a. What will be the type of employer?

- 0 ☐ 4-year college or university other than medical school
- 1 ☐ Medical school
- 2 ☐ Jr. or community college
- 3 ☐ Elem. or sec. school
- 4 ☐ Foreign government
- 5 ☐ U.S. Federal government
- 6 ☐ U.S. state government
- 7 ☐ U.S. local government
- 8 ☐ Nonprofit organization
- 9 ☐ Industry or business
- (11) ☐ Self-employed
- (12) ☐ Other (specify) (58)

- b. Indicate what your primary work activity will be with "1" in appropriate box; secondary work activity (if any) with "2" in appropriate box.

- 0 ☐ Research and development
- 1 ☐ Teaching
- 2 ☐ Administration
- 3 ☐ Professional services to individuals
- 5 ☐ Other (specify) (59-60)

- c. In what field will you be working?

Please enter number from Specialties List (61-63)

- d. Did you consider taking a postdoctoral appointment?

Yes — No — (64)

If yes, why did you decide against the postdoctoral?

- 0 ☐ No postdoctoral appointment available
- 1 ☐ Felt that I would derive little or no benefit from a postdoctoral appointment
- 2 ☐ Had more attractive employment opportunity
- 3 ☐ Other (specify) (65)

Go to Item "21"

21. What is the name and address of the organization with which you will be associated?

(Name of Organization)

(Street)

(City, State)

(Or Country if not U.S.)

(66-71)

BACKGROUND INFORMATION

22. Please indicate, by circling the highest grade attained, the education of

your father:	none	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	MA, MD PhD	Postdoctoral	(72)
																		Graduate		
your mother	none	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	MA, MD PhD	Postdoctoral	(73)
	0	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	8	9	(11)

Signature

Date

(74-76)

SPECIALTIES LIST

MATHEMATICS

- 000 Algebra
- 010 Analysis & Functional Analysis
- 020 Geometry
- 030 Logic
- 040 Number Theory
- 050 Probability & Math. Statistics (see also 544, 670, 725, 727, 920)
- 060 Topology
- 080 Computing Theory & Practice
- 082 Operations Research (see also 478)
- 085 Applied Mathematics
- 098 Mathematics, General
- 099 Mathematics, Other*

COMPUTER SCIENCES

- 079 Computer Sciences* (see also 437)

ASTRONOMY

- 101 Astronomy
- 102 Astrophysics

PHYSICS

- 110 Atomic & Molecular
- 132 Acoustics
- 134 Fluids
- 135 Plasma
- 136 Optics
- 138 Thermal
- 140 Elementary Particles
- 150 Nuclear Structure
- 160 Solid State
- 198 Physics, General
- 199 Physics, Other*

CHEMISTRY

- 200 Analytical
- 210 Inorganic
- 220 Organic
- 230 Nuclear
- 240 Physical
- 250 Theoretical
- 270 Pharmaceutical
- 275 Polymer
- 298 Chemistry, General
- 299 Chemistry, Other*

EARTH, ENVIRONMENTAL AND MARINE SCIENCES

- 301 Mineralogy, Petrology
- 305 Geochemistry
- 310 Stratigraphy, Sedimentation
- 320 Paleontology
- 330 Structural Geology
- 341 Geophysics (Solid Earth)
- 350 Geomorph. & Glacial Geology
- 391 Applied Geol., Geol. Engr. & Econ. Geol.
- 360 Hydrology & Water Resources
- 370 Oceanography
- 397 Marine Sciences, Other*
- 381 Atmospheric Physics and Chemistry
- 382 Atmospheric Dynamics

- 383 Atmospheric Sciences, Other*
- 388 Environmental Sciences, General (see also 480, 528)
- 389 Environmental Sciences, Other*
- 398 Earth Sciences, General
- 399 Earth Sciences, Other*

ENGINEERING

- 400 Aeronautical & Astronautical
- 410 Agricultural
- 415 Biomedical
- 420 Civil
- 430 Chemical
- 435 Ceramic
- 437 Computer
- 440 Electrical
- 445 Electronics
- 450 Industrial
- 455 Nuclear
- 460 Engineering Mechanics
- 465 Engineering Physics
- 470 Mechanical
- 475 Metallurgy & Phys. Met. Engr.
- 476 Systems Design & Systems Science
- 478 Operations Research (see also 082)
- 479 Fuel Tech. & Petrol. Engr.
- 480 Sanitary & Environmental
- 486 Mining
- 497 Materials Science
- 498 Engineering, General
- 499 Engineering, Other*

AGRICULTURAL SCIENCES

- 500 Agronomy
- 501 Agricultural Economics
- 502 Animal Husbandry
- 503 Food Science & Technology
- 504 Fish & Wildlife
- 505 Forestry
- 506 Horticulture
- 507 Soils & Soil Science
- 510 Animal Science & Animal Nutrition
- 511 Phytopathology
- 518 Agriculture, General
- 519 Agriculture, Other*

MEDICAL SCIENCES

- 522 Public Health & Epidemiology
- 523 Veterinary Medicine
- 526 Nursing
- 527 Parasitology
- 528 Environmental Health
- 534 Pathology
- 536 Pharmacology
- 537 Pharmacy
- 538 Medical Sciences, General
- 539 Medical Sciences, Other*

BIOLOGICAL SCIENCES

- 540 Biochemistry
- 542 Biophysics
- 544 Biometrics & Biostatistics (see also 050, 670, 725, 727, 920)

- 545 Anatomy
- 546 Cytology
- 547 Embryology
- 548 Immunology
- 550 Botany
- 560 Ecology
- 564 Microbiology & Bacteriology
- 566 Physiology, Animal
- 567 Physiology, Plant
- 569 Zoology
- 570 Genetics
- 571 Entomology
- 572 Molecular Biology
- 576 Nutrition and/or Dietetics
- 578 Biological Sciences, General
- 579 Biological Sciences, Other*

PSYCHOLOGY

- 600 Clinical
- 610 Counseling & Guidance
- 620 Developmental & Gerontological
- 630 Educational
- 635 School Psychology
- 641 Experimental
- 642 Comparative
- 643 Psychobiological
- 650 Industrial & Personnel
- 660 Personality
- 670 Psychometrics (see also 050, 544, 725, 727, 920)
- 680 Social
- 698 Psychology, General
- 699 Psychology, Other*

SOCIAL SCIENCES

- 700 Anthropology
- 708 Communications*
- 710 Sociology
- 720 Economics (see also 501)
- 725 Econometrics (see also 050, 544, 670, 727, 920)
- 727 Statistics (see also 050, 544, 670, 725, 920)
- 740 Geography
- 745 Area Studies*
- 751 Political Science
- 752 Public Administration
- 755 International Relations
- 760 Criminology & Criminal Justice
- 770 Urban & Reg. Planning
- 798 Social Sciences, General
- 799 Social Sciences, Other*

HUMANITIES

- 802 History & Criticism of Art
- 804 History, American
- 805 History, European
- 806 History, Other*
- 807 History & Philosophy of Science
- 808 American Studies
- 809 Theatre and Theatre Criticism
- 830 Music
- 831 Speech as a Dramatic Art (see also 885)
- 832 Archeology
- 833 Religion (see also 881)
- 834 Philosophy

- 835 Linguistics
- 836 Comparative Literature
- 878 Humanities, General
- 879 Humanities, Other*

LANGUAGES & LITERATURE

- 811 American
- 812 English
- 821 German
- 822 Russian
- 823 French
- 824 Spanish & Portuguese
- 826 Italian
- 827 Classical*
- 829 Other Languages*

EDUCATION

- 900 Foundations: Social & Philosoph.
- 910 Educational Psychology
- 908 Elementary Educ., General
- 909 Secondary Educ., General
- 918 Higher Education
- 919 Adult Educ. & Extension Educ.
- 920 Educ. Meas. & Stat.
- 929 Curriculum & Instruction
- 930 Educ. Admin. & Superv.
- 940 Guid., Couns., & Student Pers.
- 950 Special Education (Gifted, Handicapped, etc.)
- 960 Audio-Visual Media

TEACHING FIELDS

- 970 Agriculture Educ.
- 972 Art Educ.
- 974 Business Educ.
- 975 Early Childhood Educ.
- 976 English Educ.
- 978 Foreign Languages Educ.
- 980 Home Economics Educ.
- 982 Industrial Arts Educ.
- 984 Mathematics Educ.
- 986 Music Educ.
- 987 Nursing Educ.
- 988 Phys. Ed., Health, & Recreation
- 989 Reading Education
- 990 Science Educ.
- 992 Social Science Educ.
- 993 Speech Education
- 994 Vocational Educ.
- 996 Other Teaching Fields*
- 998 Education, General
- 999 Education, Other*

OTHER PROFESSIONAL FIELDS

- 881 Theology (see also 833)
- 882 Business Administration
- 883 Home Economics
- 884 Journalism
- 885 Speech & Hearing Sciences (see also 831)
- 886 Law & Jurisprudence
- 887 Social Work
- 891 Library & Archival Science
- 897 Professional Field, Other*
- 899 OTHER FIELDS*

* Identify the specific field in the space provided on the questionnaire.

CODE NUMBERS FOR FIELDS DISPLAYED IN TABLE 2

Physics & Astronomy (101-199)
 Chemistry (200-299)
 Earth Sciences (301-399)
 Physical Sciences Subtotal (101-399)
 Mathematics (000-060, 080-099)
 Computer Sciences (079)
 Engineering (400-499)
 EMP Total (000-499)
 Biochemistry (540)
 Basic Medical Sciences (542, 545-548, 564-566, 572)
 Other Biosciences (544, 550-562, 567-571, 576-579)
 Biosciences Subtotal (540-579)
 Medical Sciences (520-539)
 Agricultural Sciences (500-519)
 Life Sciences (500-579)
 Psychology (600-699)
 Economics and Econometrics (720, 725)
 Anthropology & Sociology (700, 710)
 Political Science, Public Administration, International Relations (751-755)
 Other Social Sciences (708, 727-745, 770-799)
 Social Sciences Total (600-799)
 Total Sciences (000-799)
 History (804-807)
 English & American Language & Literature (811-812)
 Foreign Languages & Literature (821-829)
 Other Humanities (802, 808-809, 830-879)
 Humanities Total (802-879)
 Professional Fields (881-897)
 Education (900-999)
 Total Non-Sciences (802-897, 900-999)
 Other or Unspecified (899)

TITLES OF DEGREES INCLUDED IN THE SURVEY OF EARNED DOCTORATES

DAS	Doctor of Applied Science	SDJ	Doctor of Juridical Science
DArch	Doctor of Architecture	JSD	Doctor of Juristic Science
DA	Doctor of Arts	DLS	Doctor of Library Science
DBA	Doctor of Business Administration	DMin or DM	Doctor of Ministry (except professional)
JCD	Doctor of Canon Law	DM	Doctor of Music
DCJ	Doctor of Criminal Justice	DMA	Doctor of Musical Arts
DCrim	Doctor of Criminology	DME	Doctor of Music Education
EdD	Doctor of Education	DML	Doctor of Modern Languages
DEng	Doctor of Engineering	DNSc	Doctor of Nursing Science
DESc	Doctor of Engineering Science	PhD	Doctor of Philosophy
ScDE	Doctor of Engineering Science	DPE	Doctor of Physical Education
DEnv	Doctor of Environment	DPA	Doctor of Public Administration
DED	Doctor of Environmental Design	DPH	Doctor of Public Health
DFA	Doctor of Fine Arts	DRec or DR	Doctor of Recreation
DF	Doctor of Forestry	DRE	Doctor of Religious Education
DGS	Doctor of Geological Science	DSM	Doctor of Sacred Music
DHS	Doctor of Health and Safety	STD	Doctor of Sacred Theology
DHL	Doctor of Hebrew Literature	DSc	Doctor of Science
DHS	Doctor of Hebrew Studies	DScH	Doctor of Science and Hygiene
DIT	Doctor of Industrial Technology	DScD	Doctor of Science in Dentistry
		LScD	Doctor of Science and Law
		DScVM	Doctor of Science in Veterinary Medicine
		DSSc	Doctor of Social Science
		DSW	Doctor of Social Work
		ThD	Doctor of Theology